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ADDENDUM NO. 2

DATE: November 30, 2022

FROM: Baxter & Woodman, Inc., Consulting Engineers

TO: Planholders of record for the Work titled:

City of Joliet, Illinois
St. Pat's Phase 1A Water Main Improvements
City of Joliet Contract No. 2689-0123

The Bidding Documents are amended as follows:

1. SPECIFICATIONS

   A. Section 00 01 10, TABLE OF CONTENTS:

      Delete Section 00 01 10, TABLE OF CONTENTS in its entirety and insert the attached TABLE OF CONTENTS, revision dated November 30, 2022.

   B. Section 01 22 29, MEASUREMENT AND PAYMENT:

      Delete the **DUPLICATE** Section 00 41 00.41, BID FORM in its entirety, and insert the attached new Section 01 22 29, MEASUREMENT AND PAYMENT, revision dated November 30, 2022, in lieu thereof.

   C. APPENDIX D, IEPA FORM LPC-662 AND SOIL BORINGS REPORT:

      Insert the attached new Appendix D, IEPA FORM LPC-662 AND SOIL BORINGS REPORT into the Project Manual.

Nothing in this Addendum shall be construed as changing other requirements of the Bidding Documents. Each Bidder shall acknowledge receipt of this Addendum by stating this on the outside of the SEALED bid package. BID PROPOSALS SHALL NOT BE OPENED WITHOUT ACKNOWLEDGEMENT OF RECEIPT OF ALL ADDENDUMS FOR THE GIVEN CONTRACT.

END OF ADDENDUM NO. 2

CITY OF JOLIET, ILLINOIS
ST. PAT'S PHASE 1A WATER MAIN IMPROVEMENTS
PROJECT MANUAL

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SECTION 01 22 29

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SUMMARY

A. Payment will be made for the Pay Items listed herein and at the Contract Unit Prices unless otherwise indicated.

B. Work for which a Pay Item is not listed will be considered incidental to the Contract and no additional compensation will be allowed.

C. The Owner reserves the right to alter the Drawings, modify incidental work as may be necessary, and increase or decrease quantities of work to be performed including deduction or cancellation of any one or more of the Pay Items.

D. Quantities necessary to complete the work as shown on the Drawings or as specified herein govern over those shown in the Bid Form. The Engineer will make corrections and interpretations as may be deemed necessary for fulfillment of the intent of the Contract Documents.

E. The Engineer will make measurements and determinations as necessary to classify the work within Pay Items and determine the quantities for payment.

F. If the Contractor's Application for Payment is not in accordance with the Engineer's determination of quantities for payment, the Application will be returned for correction and resubmittal.

PART A – WATER MAIN IMPROVEMENTS

1.2 PRECONSTRUCTION VIDEO RECORDING

A. Description:
   1. The work of this Pay Item consists of video recording at the construction areas prior to start of construction.
   2. This Pay Item includes providing separate video and photographs of highway rights-of-way, prior to construction, at locations where pipelines are installed parallel to or across highways and the highway authorities require this documentation as a condition of the permit.
   3. This Pay item includes providing video in tape format, and/or digital disk format if required by Owner or permitting agency.

B. Basis of Payment:
   1. The work will be paid for at the Contract Lump Sum Price for PRECONSTRUCTION VIDEO RECORDING.

1.3 TRAFFIC CONTROL AND PROTECTION

A. Description:

1. The work of this item consists of furnishing, installing, relocating, and maintaining traffic control devices for temporary control of vehicular and pedestrian traffic during construction. The following work items are associated with and shall be considered incidental to, this work:
    a. Furnish, install, maintain, relocate, and remove traffic control devices.
    b. Furnish and use temporary flaggers.
    c. Furnish, place, and remove devices utilized for detours and construction safety.
    d. Provide plans and schedules for detour and construction signage at Pre-construction Meeting for review and approval by Owner.
    e. Provide and maintain temporary pavement markings (TAPE) until placement of final pavement markings.
    f. Remove temporary pavement markings (TAPE) prior to installation of bituminous binder or surface courses.

B. Measurement:

1. This work will be measured as a lump sum, paid as a direct percentage of total project completion.

C. Basis of Payment:

1. This work will be paid for at the Contract Lump Sum Price for TRAFFIC CONTROL AND PROTECTION.

1.4 GRANULAR TRENCH BACKFILL

A. Description:

1. This work shall conform to Section 208 of the “Standard Specifications”. This item shall consist of furnishing, placing, compacting and transporting course aggregate gradation CA-6 or CA-7 for backfilling material for all trenches made within the roadway, driveways, sidewalks, and as directed by the Engineer. All compaction shall be not less than 85 percent optimum, modified proctor. The material shall conform to Article 1004.5. This item also includes the disposal of surplus excavated material which is replaced by trench backfill. Such disposal shall be made in accordance with Article 202.3 of the “Standard Specifications”.
2. The Contractor shall maintain trenches flush with existing surfaces until permanent patches are installed or roadway excavation has begun. No additional compensation will be provided to the Contractor for trench maintenance.
3. Trench backfill quantities are measured from a point 12” above the top of pipe.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per cubic yard for GRANULAR TRENCH BACKFILL. Quantities incorporated into this item shall be measured by either the Trench Backfill table provided in the technical specifications for water main installation or the Trench Backfill table published by the State of Illinois, Department of Transportation, Division of Highways, Bureau of Construction for sewer replacements.

VOLUME OF TRENCH BACKFILL (CU YD) PER LINEAL FOOT OF WATER MAIN

Nominal Pipe Size		4"	6"	8"	10"	12"	14"	16"	24" Casing
Average Depth to Top of Pipe	2.0	**0.08**	**0.08**	**0.09**	**0.09**	**0.10**	**0.11**	**0.11**	**0.13**
	2.5	**0.11**	**0.12**	**0.13**	**0.14**	**0.15**	**0.16**	**0.17**	**0.20**
	3.0	**0.15**	**0.16**	**0.17**	**0.18**	**0.20**	**0.21**	**0.22**	**0.38**
	3.5	**0.18**	**0.20**	**0.21**	**0.23**	**0.38**	**0.40**	**0.42**	**0.47**
	4.0	**0.22**	**0.40**	**0.42**	**0.44**	**0.46**	**0.48**	**0.50**	**0.56**
	4.5	**0.45**	**0.47**	**0.49**	**0.51**	**0.54**	**0.56**	**0.58**	**0.65**
	5.0	**0.51**	**0.53**	**0.56**	**0.59**	**0.61**	**0.64**	**0.66**	**0.75**
	5.5	**0.57**	**0.60**	**0.63**	**0.66**	**0.69**	**0.72**	**0.75**	**0.84**
	6.0	**0.63**	**0.67**	**0.70**	**0.73**	**0.76**	**0.80**	**0.83**	**0.93**
	6.5	**0.70**	**0.73**	**0.77**	**0.80**	**0.84**	**0.88**	**0.91**	**1.02**
	7.0	**0.76**	**0.80**	**0.84**	**0.88**	**0.92**	**0.95**	**0.99**	**1.12**
	7.5	**0.82**	**0.87**	**0.91**	**0.95**	**0.99**	**1.03**	**1.08**	**1.21**
	8.0	**0.89**	**0.93**	**0.98**	**1.02**	**1.07**	**1.11**	**1.16**	**1.30**

1.5 DUCTILE IRON PIPE MOBILIZATION

A. Description:

1. The work of this Pay Item consists of all work and operations necessary for the transportation of ductile iron pipe by the Contractor from City facilities to the work site.
2. Ductile iron pipe will be procured by the City and stored at the following two locations.
   a. Washington Street Water Treatment Plant, 921 E Washington St, Joliet, Illinois
   b. East Side Wastewater Treatment Plant, 815 S Adler, Joliet, Illinois
3. Pipe supplied directly to the work site by supplier or the City will not be paid for.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per lineal foot for DUCTILE IRON PIPE MOBILIZATION, regardless of the pipe sizes.

1.6 WATER MAIN (OPEN CUT)

A. Description:

1. The work of this Pay Item consists of PVC water main pipe and restrained joint type (RJT) PVC water main pipe complete in place, including sawcutting, and removal and disposal of existing pavements; excavation; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; trench dewatering, including erosion and sedimentation control methods and devices to provide protection to environment from all pumping operations; installation of pipe; bracing; bedding and covering of pipe; trench backfilling with and compaction of excavated materials; testing; disinfection, finish grading; but not including backfilling with granular backfill materials.
2. This Pay Item includes all restrained joint type (RJT) fittings complete in place as shown on the Drawings. Additional fittings not shown on the Drawings shall be paid for as MISCELLANEOUS FITTINGS.
3. This Pay Item includes RJT pipe on each side of a fitting or valve to be restrained to the length indicated on the Drawings, or if not shown on the Drawings, to the distance indicated on the Restrained Joint Type Pipe Length table on the Drawings or a minimum distance of not less than two factory length pipes on each side of a fitting or valve to be restrained.
    a. A restrained joint between two sections of pipe serves to restrain both pipe sections, and both sections of pipe would be considered RJT pipe.
4. Installing new mains in excess of 5 feet of cover in order to cross existing mains, provide for future improvements or cross below sewer lines is considered incidental to the installation of the water main, and no addition to the contract will be allowed.
5. This Pay Item includes polyethylene wrapping of all pipe fittings.
6. The work of this Pay Item includes providing tracer wire, laid alongside water main installed by open cut methods; installing tracer wire through structures such as valve vaults and fire hydrants; and providing connection points for testing devices in structures, alongside structures, or up to and alongside fire hydrants.
7. The work of this Pay Item includes providing and installing marking tape above water mains that are installed by open cut methods, including protection of the tape during backfill operations. Position warning tape at distance above pipe, or at depth below surface, as noted in the Specifications.
8. Removal and replacement of material, including unsuitable material, to a depth of one foot below the bottom of the pipe barrel is considered incidental to construction and no addition to the contract will be allowed.

9. Overexcavation, and removal and replacement of unsuitable materials with CA 1 greater than one foot below the bottom of the pipe barrel will be paid for in a separate Pay Item.
10. This Pay Item includes pipe insulation at locations indicated on the Drawings and as directed by the Engineer.
11. This Pay Item includes tree tunneling at locations indicated on the Drawings and as directed by the Engineer.
12. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Measurement:
1. The work will be measured in lineal feet along the centerline of the pipe.
2. The measurement will go through fittings and valves.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per lineal foot for WATER MAIN (OPEN CUT) of the pipe sizes, regardless of depth.

1.7 WATER MAIN (DIRECTIONALLY DRILLED)

A. Description:
1. The work of this Pay Item consist of installing PVC water main pipe complete in place by directional drilling methods; including providing insertion and receiving pits, tightsheeting where required to protect adjacent utilities, roadways and property, or to provide protection to the public; leaving tightsheeting in place if indicated on the Drawings; protection, repair or replacement of utilities; traffic control; fencing of work site to provide protection to public; excavation; removal and disposal of waste excavated materials; bracing; dewatering, including erosion and sedimentation control methods and devices to provide protection to environment from all pumping operations; testing; backfilling with and compaction of excavated materials at pits, but not including backfilling with granular backfill materials when working within pavement; cleanup; and finish grading.
2. Installing new mains in excess of 5 feet of cover in order to cross existing mains, provide for future improvements or cross below sewer lines is considered incidental to the installation of the water main, and no addition to the contract will be allowed.
3. This Pay Item includes polyethylene wrapping of all pipe fittings.
4. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Measurement:
1. The work will be measured in lineal feet along the centerline of the pipe, and will begin and end at the transition to open cut water main pipe.

2. Length of pipe can be measured with the Engineer prior to insertion, and totaled to arrive at total pay length.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per lineal foot for WATER MAIN (DIRECTIONALLY DRILLED) of the pipe sizes and type, regardless of depth.

1.8 MISCELLANEOUS FITTINGS

A. Description:
1. The work of this Pay Item consists of any additional fittings necessary to alter or adjust the water main as directed by the Engineer. All fittings shown or inferred by the plans shall be incidental to the cost per lineal foot of WATER MAIN (OPEN CUT). Any fitting indicated on the plans which is deleted will be credited against any claim for payment under MISCELLANEOUS FITTINGS, pound for pound. The Owner shall not in any case request a net credit under this provision.

B. Basis of Payment:
1. The work will be paid for at the contract unit price per pound for MISCELLANEOUS FITTINGS.

1.9 WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP

A. Description:
1. The work of this Pay Item consists of connecting water service lines to the water mains complete in place, including service saddles; corporation stops; curb stops; service boxes; all required fittings.
2. The tap into the existing public water main will be performed by the City of Joliet.
3. This Pay Item includes connecting to the curb stop within meter pits, where meter pits are encountered.
4. Water service connection trenches and pits shall be restored at the end of each work day.
5. Notify the City’s Public Utilities Department if existing lead water services are discovered.
6. The work of this Pay Item includes all labor, equipment and materials required to remove the top section of existing b-boxes located by the Contractor and as required by the Engineer.
7. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP of the service pipe sizes, and the item noted.

1.10 WATER SERVICE LINE TYPE K

A. Description:

1. The work of this Pay Item shall include furnishing and installing all materials required to lay water service piping in accordance to Sections 41-2.11c and 41-2.12 of the “Standard Specifications for Water and Sewer Construction in Illinois current Edition”. The work consists of water service pipe complete in place, by horizontal directional drilling method and open cut method, including excavation; bracing; bedding and covering of pipe; trench dewatering; trench backfilling with excavated materials; testing; disinfection; finish grading; removal and disposal of waste excavated materials; protection, and replacement or repair of utilities.
2. Embedment up to one foot above the pipe and earthen backfill shall be included in the cost per lineal foot of water service line
3. Water service will be installed by horizontal directional drilling method under street pavements and for all rear yard service replacements, and open cut methods at connection points to water main and existing service pipe.
4. The open cut method includes backfilling with compacted granular backfill materials.
5. All service lines shall have a minimum depth of 54”, unless otherwise approved by the Engineer.
6. Installing new services in excess of 5 feet of cover in order to cross existing mains, provide for future improvements or cross below sewer lines is considered incidental to the installation of the service, and no addition to the contract will be allowed.
7. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Measurement:

1. The work will be measured in lineal feet along the centerline of the pipe.

C. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per lineal foot for WATER SERVICE TYPE K – OPEN CUT or WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING of the water service sizes specified.

1.11 CONNECT TO WATER MAIN (NON-PRESSURE)

A. Description:

1. The work of this Pay Item consists of connecting to existing water mains, including removal of existing plugs; cutting, removing, and plugging existing mains; all required fittings; thrust blocking; excavation; bracing; bedding and covering of pipe; trench dewatering; trench backfilling with excavated materials; testing; disinfection; finish grading; removal and disposal of waste excavated materials; protection, replacement, or repair

of utilities; including backfilling with compacted granular backfill materials where required.

2. This Pay Item includes installation and removal of temporary thrust blocking and temporary plugs and coordination of shutdown of main with Owner and Engineer during final connection.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price for each CONNECT TO WATER MAIN (NON-PRESSURE) of the pipe sizes.

1.12 CONNECT TO WATER MAIN (PRESSURE)

A. Description:

1. The work of this Pay Item consists of pressure connections to existing water mains complete in place, including sawcutting, and removal and disposal of existing pavements; excavation; removal and disposal of waste excavated materials; trench dewatering, including erosion and sedimentation control for discharge resulting from all pumping operations; protection, replacement, or repair of utilities; tapping of pipe; tapping valves and tapping sleeves; all required fittings; bracing; testing corps and copper; bedding and covering of pipe; testing; disinfection; finish grading; and including backfilling with granular backfill materials; but not including valve vaults.

2. The City of Joliet Water Department shall do the actual tapping of the main. The Contractor will be responsible for calling 815-724-4230 to schedule an appointment with the City Water Department. Appointments are available on Tuesdays and Thursdays.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price for each CONNECT TO WATER MAIN (PRESSURE) of the pipe and valve sizes.

1.13 GATE VALVE

A. Description:

1. The work of this Pay Item consists of gate valves complete in place, but not including fire hydrant auxiliary valves or tapping valves.

2. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price for each GATE VALVE of the valve sizes.

1.14 VALVE BOX

A. Description:
   1. The work of this Pay Item consists of valve boxes, complete in place, including polyethylene wrapping of valve box; valve box stabilizer; but not including fire hydrant auxiliary valves.

B. Basis of Payment:
   1. The work will be paid for at the contract Unit Price for each VALVE BOX.

1.15 VALVE VAULT

A. Description:
   1. The work of this Pay Item consists of the installation of valve vaults during open cut water main installation complete in place as outlined in the technical specifications and on plan details, including sawcutting, removal and disposal of existing pavements; excavation in excess of that required for standard pipeline trench construction; removal and disposal of waste excavated materials; bracing, sheeting, and shoring; protection, replacement, or repair of utilities; dewatering, including erosion and sedimentation control methods and devices to provide protection to the environment from all pumping operations; vault bedding; monolithic type vault base with watertight flexible pipe connectors where pipes enter vault wall; manhole risers as required to provide proper depth; concentric cone or flat top cover; frame and cover adjusting rings; frame and cover; steps; backfilling with compacted excavated materials in parkways, and compacted granular materials under pavements; and including frame and cover adjustment to final grade at time of street or parkway restoration.
   2. Provide eccentric cones only on vaults utilized for tapping of existing mains, or when indicated on the Drawings.
   3. This Pay Item includes providing vaults of sufficient depth to provide the standard depth of cover indicated on the drawings, plus two feet, measured from the top of the water main to the top of the frame and cover. If depth of cover is 6 feet, vaults to a depth of 8 feet from top to main to top of frame and cover will be installed with no addition to the contract allowed. Where deeper vaults are installed, the cost for additional manhole risers required will be paid for in a separate Pay Item.
   4. This Pay Item includes providing and installing bolt-down watertight frame and cover on all valve vaults.
   5. This Pay Item includes providing exterior joint protection on all valve vaults.

B. Basis of Payment:
   1. The work will be paid for at the Contract Unit Price for each VALVE VAULT, of the size indicated.

1.16 VALVE VAULT (ADDITIONAL DEPTH)

A. Description:
   1. The work of this Pay Item consists of providing additional manhole risers for water valve vaults where the depth of cover is over the standard depth described in the pay item for VALVE VAULTS.
   2. Depth of a standard valve vault is stated as within two vertical feet of the water main depth of cover, measured from top of main to top of cover, in other words, if standard depth of water main is indicated as 6 feet, a vault measuring 8 feet from top of main to top of frame and cover is a standard vault and no additional compensation will be allowed.

B. Measurement:
   1. The work will be measured in vertical feet from the top of the water main to the top of the frame and cover, and the amount over the depth of cover plus 2 feet will be the amount of measurement, in even feet.

C. Basis of Payment:
   1. The work will be paid for at the Contract Unit Price per vertical foot of VALVE VAULT (ADDITIONAL DEPTH), of the valve vault diameter indicated.

1.17 FIRE HYDRANT

A. Description:
   1. The work of this Pay Item consists of fire hydrants complete in place, including excavation; bracing; bedding and covering of pipe; 6-inch ductile iron pipe necessary to connect to water main; auxiliary gate valve and valve box; thrust blocking; hydrant barrel drain washed stone pocket; support; trenching dewatering; trench backfilling with excavated materials; testing; disinfection; finish grading; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; and including backfilling with granular backfill materials where connecting pipe is below pavement.
   2. This Pay Item includes polyethylene wrapping of connecting pipe, auxiliary valve, and hydrant.
   3. This Pay Item includes providing a fire hydrant of sufficient height to position the hydrant nozzles and break-away flange to the elevations indicated in the technical specifications and plan detail. Contractor will determine the proper “bury” height based on water main size and depth of bury.
   4. Where depth of water main is required to be greater than standard bury depth, fire hydrant extensions will be paid for as FIRE HYDRANT BARREL EXTENSION.
   5. Connecting pipe will be procured by the City. Transportation of connecting pipe from City facilities to the work site by the Contractor will be paid for as DUCTILE IRON PIPE MOBILIZATION.

6. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each FIRE HYDRANT.

1.18 FIRE HYDRANT BARREL EXTENSION

A. Description:
1. The work of this Pay Item consists of providing barrel extensions for fire hydrants when existing or future final grade conditions result in the water main being deeper than the specified depth of bury, including determining the appropriate extension height and extension necessary, and installation of extension.

B. Measurement:
1. The work will be measured in vertical foot of extension, determined by the amount added to the fire hydrant bury dimensions outlined in Pay Item FIRE HYDRANT.
2. Extensions utilized to obtain the proper amount “bury” on fire hydrants when the water main is not deeper than the specified depth of bury will not be paid for.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for vertical foot of FIRE HYDRANT BARREL EXTENSION, to the nearest foot.

1.19 ABANDONMENT OF EXISTING WATER MAINS AND APPURTENANCES

A. Description:
1. The work of this Pay Item consists of the abandonment of existing water main, valves, vaults, and fire hydrants including installing plugs and/or caps on existing mains where portions of the existing main are to be abandoned after the new main is in service; coordination of shut-down of mains with Owner and Engineer; excavation and re-excavation of locations; removal of fire hydrant and auxiliary valve box; removal of valve box; removal of frame and cone section of valve vault; protection, replacement, or repair of utilities; removal and disposal of waste excavated materials; cutting of mains; installation of plugs or caps; concrete thrusts blocks; backfilling and compaction of excavated materials or granular trench backfill materials in pavements.
2. This work shall include all labor, materials and equipment necessary to remove an existing fire hydrant and auxiliary valve box. Contractor shall excavate a minimum of 3’ and saw cut and remove riser pipe.

3. This work shall include all labor, materials, and equipment necessary to remove an existing valve box in its entirety as shown on the plans. Contractor shall be responsible for off-site disposal of valve box.
4. This work shall include all labor, materials, and equipment necessary to remove the frame and cone section of the vault. Remainder of the vault is to be filled with trench backfill which will be considered incidental to this item. Contractor shall be responsible for off-site disposal of valve vault.
5. Deliver valves, valve boxes, fire hydrants, and frames and lids to the Owner at 921 Washington Street, Joliet, Illinois.
6. Installation of concrete plugs in abandoned water mains or crimping of water services at the edge of the trench area is considered incidental to the installation of the new water main.
7. Removal and disposal of existing water main that must be removed in order to install the new water main or services is considered incidental to construction.
8. Length of dead end main shall be no greater than two times the outside diameter of the main.
9. This work shall include abandonment of existing water main pipes within sanitary structures, including cutting and removing the existing water main within the sanitary structure, grinding flush within 1-inch of the manhole structure wall, and installation of concrete or brick and mortar plugs. It is estimated that there are 7 occurrences of existing water mains within sanitary structures.

B. Basis of Payment:
1. The work will be paid for at the Contract Lump Sum Price for each ABANDONMENT OF EXISTING WATER MAINS AND APPURTENANCES, at the locations and types noted.

1.20 SANITARY SEWER REMOVAL AND REPLACEMENT

A. Description:
1. The work of this Pay Item consists of the removal and replacement of existing sanitary sewer with Class 52 ductile iron pipe or water main quality PVC pipe, including sawcutting, and removal and disposal of existing pavement; protection, repair or replacement of utilities; excavation; removal and disposal of waste excavated material; trench dewatering, including erosion and sedimentation control; watertight connections to existing pipes or structures; installation of pipe; bracing, bedding and covering of pipe; granular trench backfill material at pipe crossing and below all pavement; and cleanup.
2. Where new water main is being installed parallel to storm sewer, the ductile or PVC replacement shall extend on each side of the crossing until the perpendicular distance from the water main to the sewer is at least 10 feet.

B. Measurement:
1. The work will be measured in lineal feet along the centerline of the sanitary

sewer pipe removed and replaced.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per lineal foot for SANITARY SEWER REMOVAL AND REPLACEMENT, of the size and type indicated.

1.21 INLET PROTECTION FILTER

A. Description:
1. The work of this Pay Item consists of providing and installing inlet protection filters.

B. Measurement:
1. Inlet protection filters will be measured as per each item.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per each INLET PROTECTION FILTER.

1.22 HOT-MIX ASPHALT REMOVAL AND REPLACEMENT

A. Description:
1. The work of this Pay Item consists of replacing street pavement that has been removed as part of the water main work. Restoration will consist of hot-mix asphalt binder course and hot-mix asphalt surface course of the thicknesses specified, installed within the trench limits to match the existing surface. The following items are associated with and shall be considered incidental to this Pay Item:
a. All quality control testing in accordance with Article 1030.05(d).
b. Prime coat applications.
c. Sawcutting to provide clean, straight edges is mandatory, regardless of the number of times required.
d. The thickness to be used are 2.5 inch binder and 1.5 inch surface course.

B. Measurement:
1. Street restoration of trenches will be measured in place and the area computed in square yards.
a. The length will be measured down the centerline of the pipe.
b. All areas disturbed shall be restored, but the maximum allowable trench widths used for pay quantity calculations will be 6 feet centered on the pipe. If the Contractor chooses to relocate the trench farther away from the curb and gutter, the pavement patch will extend from the sawcut in the existing pavement to the face of the gutter and the maximum allowable width of 6 feet will be used for pay quantity calculations. If the Owner or Engineer relocates the trench away from

the curb and gutter, additional quantities will be calculated based on the actual trench width as approved by the Engineer.

C. Basis of Payment:
1. The street pavement restoration at water main and sewer trenches will be paid for at the Contract unit price per square yard of the thicknesses indicated as HOT-MIX ASPHALT REMOVAL AND REPLACEMENT.

1.23 HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT

A. Description:
1. The work of this Pay Item consists of constructing hot-mix asphalt driveway aprons to match current City standards. The following work items are associated with and shall be considered incidental to, this Pay Item:
a. All quality control testing in accordance with Article 1030.05(d).
b. Excavate and dispose of existing subgrade material to proposed subgrade elevation.
c. Prepare Subgrade.
d. Replace steel edging if applicable.
e. Install minimum 3” aggregate Base Course.
f. Install 1.5-inch hot-mix asphalt base for driveways.
g. Install Bituminous Materials (Prime Coat).
h. Place hot-mix asphalt Surface Course, (1.5-inch compacted depth).
i. Utilize driveway mix for Surface Course if so directed by Engineer.

B. Measurement:
1. Driveway removal and replacement will be measured in place prior, and the area computed in square yards.
2. Additional quantities of driveway, subbase, or subgrade removed due to neglect by the Contractor, as determined by the Engineer, will not be measured for payment.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per square yard for HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT of the thickness indicated in the Specifications.

1.24 PCC DRIVEWAY REMOVAL AND REPLACEMENT

A. Description:
1. The work of this Pay Item consists of constructing Portland Cement Concrete driveway and subgrade as directed by the Engineer. The following work items are associated with, and shall be considered incidental to, this Pay Item:
a. All quality control testing in accordance with Article 1020.09.
b. Excavate and dispose of existing subgrade material to proposed subgrade elevation.
c. Prepare Subgrade.
d. Replace steel edging if applicable.

e. Install minimum 3” aggregate Base Course.
f. Install 6 x 6-W4.0 x W4.0 welded wire fabric.
g. Install Portland Cement Concrete.
h. Apply Protective Coat.

B. Measurement:
1. Driveway removal and replacement will be measured in place, and the area computed in square yards.
2. Additional quantities of driveway, subbase, or subgrade removed due to neglect by the Contractor, as determined by the Engineer, will not be measured for payment.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per square yard for PCC DRIVEWAY REMOVAL AND REPLACEMENT.

1.25 CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT

A. Description:
1. The work of this Pay Item consists of constructing concrete curb and gutter of the type indicated. The following work items are associated with, and shall be considered incidental to, this Pay Item.
a. All quality control testing in accordance with Article 1020.09.
b. Sawcut existing curb and gutter, including steel reinforcement.
c. Break, remove, and dispose of existing curb and gutter.
d. Prepare aggregate Base Course below curb and gutter.
e. Install Combination Concrete Curb and Gutter.
f. Install all expansion joints, contraction joints, slip dowels, and tie bars.
g. Install Protective Coat.
h. Provide handicap ramps at sidewalks and depressed curb at driveways.

B. Measurement:
1. Curb and Gutter Removal and Replacement will be measured in lineal feet along the flow line of the gutter from full-depth sawcut to full-depth sawcut, with a maximum pay quantity of 10 lineal feet per crossing unless otherwise noted on the Drawings.
2. Curb and gutter damaged by the Contractor during construction operations beyond the limits described above, will be replaced but will not be measured for payment.
3. The repair of adjacent pavement, driveways, sidewalks, and landscaping is included in this item unless specifically identified for separate payment on the Drawings.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per lineal foot for CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT.

1.26 PCC SIDEWALK REMOVAL AND REPLACEMENT

A. Description:
   1. The work of this Pay Item consists of constructing sidewalks to match existing. The following work items are associated with, and shall be considered incidental to this Pay Item:
      a. All quality control testing in accordance with Article 1020.09.
      b. Excavate and dispose of existing materials.
      c. Install 3 inches of compacted Aggregate Base Course.
      d. Form and pour Portland cement concrete sidewalk.
      e. Remove forms and backfill areas adjacent to concrete sidewalk.
      f. Apply protective coat.
   2. Sidewalk damaged by the Contractor during construction operations beyond the limits of the trench will be replaced at no cost to the Owner.

B. Measurement:
   1. Portland Cement Concrete Sidewalk will be measured in place, and the area computed in square feet, up to the limits indicated on the Drawings.
   2. A maximum width of ten lineal feet per crossing will be utilized for pay quantity calculations.

C. Basis of Payment:
   1. This work will be paid for at the Contract Unit Price per square foot for PCC SIDEWALK REMOVAL AND REPLACEMENT of the material thicknesses indicated in Section 32 10 00.19.

1.27 DETECTABLE WARNINGS

A. Description:
   1. The work of this Pay Item includes constructing detectable warnings with cast-in-place 24” by 48” detectable warnings comprised of two 24” by 24” square cast iron plates. The panel shall comply with ADA requirements. The domes located on the plate shall be parallel to the pavement crosswalk with the closest corner at the back of curb. Installation shall be according to the manufacturer’s recommendations.

B. Basis of Payment:
   1. The work will be paid for at the Contract Unit price per square foot for DETECTABLE WARNINGS.

1.28 MOVE AND RESET PLANTERS

A. Description:
   1. This work includes furnishing all materials, equipment, and labor necessary to remove and re-install planters that interfere with work to install new water main. All planters shall be carefully salvaged and placed near the area from which they were taken. Any planters damaged by the Contractor shall be replaced at the Contractor’s expense with planters matching the color and

style of the existing planters.

B. Basis of Payment:
1. This work will be paid for at the contract unit price per each MOVE AND RESET PLANTERS.

1.29 REMOVE AND RESET RETAINING WALL

A. Description:
1. This work includes furnishing all materials, equipment, and labor necessary to remove and re-install retaining wall blocks and timbers that interfere with the work to install new water main and water services. All retaining wall blocks and timbers shall be carefully salvaged and placed near the area from which they were taken. Any blocks or timbers damaged by the Contractor shall be replaced at the Contractor's expense with blocks and timbers matching the color and style of the existing blocks and timbers.
2. The following work items are associated with, and considered incidental to this Pay Item:
a. Excavation, bracing, and shoring.
b. Protection, replacement, or repair of utilities.
c. Backfilling with ¾ inch washed stone behind the wall up to 4-inches from the top of the cap.
d. 6-inches minimum thickness of compacted aggregate base course under the retaining wall base course.
e. Removal and disposal of waste excavated materials.

B. Basis of Payment:
1. This work will be paid for at the contract unit price per lineal foot for REMOVE AND RESET RETAINING WALL.

1.30 PAVEMENT MARKING

A. Description:
1. The work of this Pay Item consists of complete replacement of pavement marking, lines, letters, or symbols of the patterns, sizes, and colors.
2. Replace all pavement markings removed or damaged within the limits and construction, as shown on the Drawings, as recorded on the "Job Set" plan prior to removal, or as directed by the Engineer. This work shall be done as specified in Sections 780, 781, and 783 of the IDOT "Standard Specifications", and Section 32 10 00.19 of these Specifications.

B. Measurement:
1. The work will be measured in lineal feet of line, or in square feet for letters and symbols.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per lineal feet for line, of the widths indicated, and per square foot for letters or symbols as

PAVEMENT MARKING, of the type noted.

1.31 RESTORATION OF LAWNS AND PARKWAYS

A. Description:
1. The work of this Pay Item consists of complete surface restoration of lawns, parkways, and other grassed areas disturbed as a result of the construction, including topsoil, lime, fertilizer, erosion control materials, seeding, and maintenance.

B. Measurement:
1. The work will be measured in lineal feet along the centerline of the pipe and the area computed in square yards, with a maximum allowable width of 6 feet for main line pipe and maximum width of 6 feet for service pipes.
2. Areas damaged by or disturbed beyond the work area will be restored at no additional cost to Owner.
3. Areas damaged or disturbed on private property is incidental and will be restored at no additional cost to the Owner.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per square yard for RESTORATION OF LAWNS AND PARKWAYS.

1.32 REMOVE AND REPLACE DRAIN TILES

A. Description:
1. This work shall include all labor, equipment and materials required to remove and replace existing drain lines on private property that are damaged during installation of new water service lines. PVC and corrugated plastic drains shall be replaced to match existing pipe material. VCP drains shall be replaced with PVC.
2. This Pay Item covers pipe sizes as listed in the Bid Form, since the actual size and location of the tiles is unknown.

B. Measurement:
1. The work will be measured along the centerline of the drain tile replaced, for the length of the replacement.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per lineal foot as REMOVE AND REPLACE DRAIN TILES, of the size range indicated.

1.33 ADJUSTING SANITARY SEWER SERVICE LINE

A. Description:
1. The work of this Pay Item shall be completed in accordance with the latest edition of the “Standard Specifications for Water and Sewer Construction in Illinois”, and shall consist of the removal and replacement, or adjustment

and relocation, of sanitary sewer service lines in conflict with the water main at crossing locations complete in place, including connections to the existing service lines; couplings; excavation; bracing; bedding and covering of pipe; trench dewatering; finish grading; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; and backfilling with granular backfill materials.

2. The work shall include either the removal and replacement of at least 21' of service pipe at the existing location, slope, and elevation of the existing service pipe; or the vertical adjustment of the existing service pipe to cross below the water main.
    a. Adjustment and relocation will require replacement of enough sanitary sewer service pipe to obtain an adequate elevation difference to cross below the water main with positive slope toward the main line sewer.

B. Basis of Payment:

The work will be paid for at the Contract Unit Price for each ADJUSTING SANITARY SEWER SERVICE LINE, regardless of the depth, length, size, or pipe material of the sanitary sewer service.

1.34 DUST CONTROL

A. Description:
1. The work of this Pay Item consists of dust control by the uniform application of sprinkled water and utilization of sweepers.
2. DUST CONTROL shall be performed on an as needed basis as operations and weather dictates, and when directed by the Engineer. Frequency of DUST CONTROL operations is anticipated to be ½ of all working days per month, as defined by IDOT.
3. All equipment used for this work shall be approved by the Engineer prior to beginning work.

B. Measurement:
1. The work will be measured per each working day in which dust control operations are performed.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per day for DUST CONTROL.

1.35 REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL

A. Description:
1. The work of this Pay Item consists of the removal of organic, soft, spongy or otherwise unsuitable soils found at the bottom of open trench pipe installations or at the bottom of tunnel shafts and the replacement with gradation No. CA 1 stone complete, including removal and disposal of unsuitable materials; protection, replacement, or repair of utilities; and

dewatering, including erosion and sedimentation control methods and devices to provide protection to environment from all pumping operations.

2. Payment will be allowed for only the material below an elevation one foot below the bottom of the pipe barrel, and when removal and replacement is approved by the Engineer.

B. Measurement:

1. The work will be measured in the field and computed in cubic yards.

C. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per cubic yard for REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL, at the locations noted.

1.36 SOIL TESTS FOR CONTAMINANTS

A. Description:

1. The work of this Pay Item consists of providing the services of a geotechnical engineer to take samples of the soil at the site of the work and provide laboratory testing of the samples to determine if contaminants are present in the soil.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price for each sample, as SOIL TESTS FOR CONTAMINANTS.

1.37 CONTAMINATED WASTE DISPOSAL

A. Description:

1. The work of this Pay Item consists of testing soil samples and disposal of material from the work site that is determined to be contaminated, based upon criteria of Illinois Environmental Protection Act for CCDD materials. Soil testing should be coordinated with the City laboratory.

B. Measurement:

1. The work will be measured based on verified load tickets.

C. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per cubic yard as CONTAMINATED WASTE DISPOSAL.

1.38 EXPLORATORY EXCAVATION

A. Description:

1. This item shall cover all costs associated with performing an exploratory excavation where requested by Engineer including equipment, labor, and materials. Trench backfill where needed.

B. Basis of Payment:
   1. The work will be paid for at the Contract Unit Price for EXPLORATORY EXCAVATION for every occurrence of the depth specified.

1.39 ROCK EXCAVATION

A. Description:
   1. The work of this Pay Item consists of removing and disposing of solid rock.

B. Measurement:
   1. The work will be measured in the field and computed in cubic yards.

C. Basis of Payment:
   1. The work of this Pay Item will be paid for at the Contract Unit Price per cubic yard of rock removed as ROCK EXCAVATION.

1.40 TREE ROOT PRUNING

A. Description:
   1. The work of this Pay Item consists of root pruning using an approved mechanical root pruning saw prior to excavating around the tree and where indicated on the Drawings or as directed by the Engineer; and in such a manner as to preserve the natural growth habit of each tree complete including an equivalent amount of the top vegetative growth of the plant material within one week following root damage, the application of fertilizer nutrients, and supplemental watering. Root pruning depth to be 12" minimum.

B. Basis of Payment:
   1. The work will be paid for at the Contract Unit Price for each TREE ROOT PRUNING.

1.41 TREE TRIMMING

A. Description:
   1. The work of this Pay Item consists of trimming of trees and designated by the Engineer.
   2. The Contractor must walk the site with the Engineer prior to initiating trimming operations, and receive approval for limits of trimming.
   3. Only that amount of tree trimming necessary to complete the work will be allowed, and the Contractor must visit the site to determine the amount of clearing that will be necessary to complete the work and therefore base the Bid.

B. Basis of Payment:
   1. The work will be paid for at the Contract Lump Sum Price for TREE TRIMMING.

1.42 TREE REMOVAL AND REPLACEMENT

A. Description:
1. The work of this Pay Item consists of cutting, grubbing, removing, and replacing of trees and stumps indicated to be removed.

B. Measurement:
1. Inch Diameter. Trees to be removed as a payment item will be measured per inch of diameter. The diameter will be measured at a point 2 feet above the highest ground level at the tree and will be determined by dividing the measured circumference of the tree by 3.1416. Stumps will be measured at the elevation of the cut off. The accumulated total inches of diameter will be the pay quantity.
2. Only trees greater than or equal to 6-inch in diameter, as defined above will be considered for payment by inch diameter.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per each for TREE REMOVAL AND REPLACEMENT, 6-INCH THROUGH 12-INCH, and for TREE REMOVAL AND REPLACEMENT, OVER 12-INCH.

1.43 WATER SERVICE LOCATE

A. Description:
1. The work of this Pay Item consists of locating all newly installed water services with spray paint. This work must be completed after final paving and sweeping of roadways.

B. Basis of Payment:
1. The work will be paid for at the Contract Lump Sum Price for WATER SERVICE LOCATE.

PART B – SANITARY SEWER IMPROVEMENTS

1.44 GRANULAR TRENCH BACKFILL (SANITARY)

A. Description:
1. This work shall conform to Section 208 of the “Standard Specifications”. This item shall consist of furnishing, placing, compacting and transporting course aggregate gradation CA-6 or CA-7 for backfilling material for all trenches made within the roadway, driveways, sidewalks, and as directed by the Engineer. All compaction shall be not less than 85 percent optimum, modified proctor. The material shall conform to Article 1004.5. This item also includes the disposal of surplus excavated material which is replaced by trench backfill. Such disposal shall be made in accordance with Article 202.3 of the “Standard Specifications”.

2. The Contractor shall maintain trenches flush with existing surfaces until permanent patches are installed or roadway excavation has begun. No additional compensation will be provided to the Contractor for trench maintenance.
3. Trench backfill quantities are measured from a point 12” above the top of pipe.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per cubic yard for GRANULAR TRENCH BACKFILL (SANITARY). Quantities incorporated into this item shall be measured by either the Trench Backfill table provided in the technical specifications for water main installation or the Trench Backfill table published by the State of Illinois, Department of Transportation, Division of Highways, Bureau of Construction for sewer replacements.

VOLUME OF TRENCH BACKFILL (CU YD) PER LINEAL FOOT OF WATER MAIN

Nominal Pipe Size		4"	6"	8"	10"	12"	14"	16"	24" Casing
Average Depth to Top of Pipe	2.0	**0.08**	**0.08**	**0.09**	**0.09**	**0.10**	**0.11**	**0.11**	**0.13**
	2.5	**0.11**	**0.12**	**0.13**	**0.14**	**0.15**	**0.16**	**0.17**	**0.20**
	3.0	**0.15**	**0.16**	**0.17**	**0.18**	**0.20**	**0.21**	**0.22**	**0.38**
	3.5	**0.18**	**0.20**	**0.21**	**0.23**	**0.38**	**0.40**	**0.42**	**0.47**
	4.0	**0.22**	**0.40**	**0.42**	**0.44**	**0.46**	**0.48**	**0.50**	**0.56**
	4.5	**0.45**	**0.47**	**0.49**	**0.51**	**0.54**	**0.56**	**0.58**	**0.65**
	5.0	**0.51**	**0.53**	**0.56**	**0.59**	**0.61**	**0.64**	**0.66**	**0.75**
	5.5	**0.57**	**0.60**	**0.63**	**0.66**	**0.69**	**0.72**	**0.75**	**0.84**
	6.0	**0.63**	**0.67**	**0.70**	**0.73**	**0.76**	**0.80**	**0.83**	**0.93**
	6.5	**0.70**	**0.73**	**0.77**	**0.80**	**0.84**	**0.88**	**0.91**	**1.02**
	7.0	**0.76**	**0.80**	**0.84**	**0.88**	**0.92**	**0.95**	**0.99**	**1.12**
	7.5	**0.82**	**0.87**	**0.91**	**0.95**	**0.99**	**1.03**	**1.08**	**1.21**
	8.0	**0.89**	**0.93**	**0.98**	**1.02**	**1.07**	**1.11**	**1.16**	**1.30**

1.45 SANITARY SEWER (OPEN CUT)

A. Description:
1. The work of this Pay Item consists of Sanitary Sewer pipe complete in place by open cut, including sawcutting, removal and disposal of existing pavements; excavation; bracing, sheeting and shoring; installation of pipe;

bedding and covering of pipe; trench dewatering including erosion and sedimentation control methods and devices to provide protection to the environment from all pumping operations; trench backfilling with and compaction of excavated materials; testing; finish grading; removal and disposal of waste excavated materials; location, protection, and repair or replacement of existing structures, pipelines and utilities; and all other work incidental to and necessary for a complete open cut sanitary sewer installation; but not including backfilling with granular backfill materials.

2. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Measurement:

1. The work will be measured in lineal feet along the centerline of the Sanitary Sewer pipe between the centerline of manholes or structures.
2. Depth of cut is the distance from the original ground surface to the invert elevation of the sewer.

C. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per lineal foot for SANITARY SEWER (OPEN CUT) of the pipe sizes, pipe material, pipe fittings, and depth of cut range.

1.46 SANITARY SEWER MANHOLE

A. Description:

1. The work of this pay item consists of the installation of sanitary sewer manholes during open cut sewer installation complete in place, including sawcutting, removal and disposal of existing pavements, and excavation in excess of that required for standard trench construction; removal and disposal of excavated material; bracing, sheeting, and shoring; protection, replacement, or repair of utilities; dewatering, including erosion and sedimentation control methods and devices to provide protection to the environment from all pumping operations; temporary pumping of sewage around work area if necessary to complete work; manhole bedding; manhole base; reducer cone if large diameter manholes are utilized; manhole risers; cone or flat top cover; concrete adjusting rings; frame and cover; steps; poured or pre-formed benches and inverts; watertight flexible pipe connectors for connecting sewer pipes to manhole; backfilling with compacted excavated material, or granular material where manhole is located in pavement areas; and including frame and cover adjustment to final grade at time of street or parkway final restoration.
2. This Pay Item includes providing and installing standard frame and cover.
3. This Pay Item includes external chimney seals, exterior joint protection, exterior surface treatment system on all manholes.
4. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Measurement:
1. The depth of manholes will be measured from the invert of the outlet sewer to the top of the frame.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each SANITARY SEWER MANHOLE of the manhole sizes and depth range.

1.47 CONNECTION TO EXISTING SANITARY SEWER MANHOLE

A. Description:
1. The work of this Pay Item consists of a Connection to Existing Sanitary Sewer Manhole complete in place, including sawcutting, removal and disposal of existing pavements; excavation; bracing, sheeting and shoring; cutting and removal of precast manhole base and concrete bench as required to make the connection to the existing sanitary sewer manhole; reshaping of concrete bench; trench dewatering, including erosion and sedimentation control methods and devices to protect the environment from all pumping operations; trench backfilling with and compaction of excavated material; testing; finish grading; removal and disposal of waste excavated material; location, protection, and repair or replacement of existing structures, pipelines and utilities; and all other work incidental to and necessary for a complete connection to existing sanitary sewer manhole installation; but not including backfilling with granular backfill material.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each CONNECTION TO EXISTING SANITARY SEWER MANHOLE.

1.48 SANITARY SERVICE LINES

A. Description:
1. The work of this Pay Item consists of sanitary service lines complete in place, including plugs or connection to the existing service lines; service cleanouts; excavation; bracing; bedding and covering of pipe; trench dewatering; trench backfilling with excavated materials; pavement tunneling by augering or moiling method, testing; finish grading; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; and including backfilling with granular backfill materials where service is below pavements and not augered or moled.
2. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Measurement:
1. The work will be measured in lineal feet along the centerline of the service pipe between the centerline of the main sewer and the end of the service

pipe or the point of connection, minus the length of service pipe that is moled or augered.

2. Moled or augered pipe will be measured along the centerline of the pipe, for the length of mole or auger.

C. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per lineal foot for SANITARY SERVICE LINES of the service pipe sizes and method of installation.

1.49 EXCAVATION AND REPLACEMENT POINT REPAIR

A. Description:

1. The work of this Pay Item consists of open cut excavation and removal and replacement of existing sanitary sewer with new PVC sewer of the same size and slope complete in place or new manhole of the same size, material, and elevation, including wyes or tees, riser pipe, fittings and bends, and service lateral pipe necessary to connect to existing lateral; also incidental is traffic control, saw cutting, and removal and disposal of existing pavement; excavation; removal and disposal of existing pipe; removal and disposal of existing manhole; trench dewatering, including erosion and sedimentation control methods and devices to protect the environment from all pumping operations; temporary pumping of sewage around the work area if necessary to complete work; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; installation of pipe; installation of manhole; connection to existing pipe or manhole; bracing, bedding, and covering of pipe; testing; backfilling with granular backfill materials under pavements, and compacted excavated materials at areas in parkways or lawns; restoration of lawns, parkways, trees and shrubbery of same type and size, driveways, sidewalks, streets, shoulders, and all areas disturbed during construction.
2. This Pay Item includes internal television inspection as described in Specification 01 77 15 of entire sewer section prior to the commencement of work and after completion of the repair(s).
3. This Pay Item includes excavation and removal and replacement of additional pipe, located within street pavement.
4. This Pay Item includes replacement of all pavement markings removed or damaged within the limits and construction.

B. Basis of Payment:

1. The work will be paid for at the Contract Lump Sum Price for Repair Nos. 1-2 and at the Contract Unit Price per lineal foot for additional pipe as EXCAVATION AND REPLACEMENT REPAIR.

1.50 TELEVISING OF NEW SEWER FOR FINAL INSPECTION

A. Description:

1. The work of this Pay Item consists of closed circuit television inspection of

the new sanitary sewers to determine the condition and acceptability of the sewer, the location of all connecting service pipes, provide a narrative video of the entire length of each segment, and a written log of each inspected sewer segment, including providing a flow in the sewer during televising equivalent to that provided by a 3/4-inch garden hose, and utilizing pan and tilt camera to offer a view up each sewer service.

2. The work includes preparatory cleaning of sewer with a high-velocity water jetting machine, and removal of all construction debris from the new sewer, but the high-velocity jetter machine will not be allowed to operate directly in front of the camera during the inspection.
3. Re-televising of the sewers after correction of deficiencies discovered at initial inspection will be completed at no additional cost to the Owner.

B. Measurement:
1. The work will be measured in lineal feet along the centerline of the sewer section, and along the length of each building service line.
2. The measurement shall be from centerline of entrance structure to centerline of exit structure, and from connection point to connection point for building service lines.

C. Basis of Payment:
1. The work will be paid for at the Contract Unit Price per lineal foot of TELEVISING OF NEW SANITARY SEWER FOR FINAL INSPECTION.

1.51 HOT-MIX ASPHALT REMOVAL AND REPLACEMENT (SANITARY)

A. Description:
1. The work of this Pay Item consists of replacing street pavement that has been removed as part of the water main work. Restoration will consist of hot-mix asphalt binder course and hot-mix asphalt surface course of the thicknesses specified, installed within the trench limits to match the existing surface. The following items are associated with and shall be considered incidental to this Pay Item:
a. All quality control testing in accordance with Article 1030.05(d).
b. Prime coat applications.
c. Sawcutting to provide clean, straight edges is mandatory, regardless of the number of times required.
d. The thickness to be used are 2.5 inch binder and 1.5 inch surface course.

B. Measurement:
1. Street restoration of trenches will be measured in place and the area computed in square yards.
a. The length will be measured down the centerline of the pipe.
b. All areas disturbed shall be restored, but the maximum allowable trench widths used for pay quantity calculations will be 6 feet centered on the pipe. If the Contractor chooses to relocate the trench farther away from the curb and gutter, the pavement patch will extend from

the sawcut in the existing pavement to the face of the gutter and the maximum allowable width of 6 feet will be used for pay quantity calculations. If the Owner or Engineer relocates the trench away from the curb and gutter, additional quantities will be calculated based on the actual trench width as approved by the Engineer.

C. Basis of Payment:
1. The street pavement restoration at water main and sewer trenches will be paid for at the Contract unit price per square yard of the thicknesses indicated as HOT-MIX ASPHALT REMOVAL AND REPLACEMENT (SANITARY).

1.52 CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (SANITARY)

A. Description:
1. The work of this Pay Item consists of constructing concrete curb and gutter of the type indicated. The following work items are associated with, and shall be considered incidental to, this Pay Item.
a. All quality control testing in accordance with Article 1020.09.
b. Sawcut existing curb and gutter, including steel reinforcement.
c. Break, remove, and dispose of existing curb and gutter.
d. Prepare aggregate Base Course below curb and gutter.
e. Install Combination Concrete Curb and Gutter.
f. Install all expansion joints, contraction joints, slip dowels, and tie bars.
g. Install Protective Coat.
h. Provide handicap ramps at sidewalks and depressed curb at driveways.

B. Measurement:
1. Curb and Gutter Removal and Replacement will be measured in lineal feet along the flow line of the gutter from full-depth sawcut to full-depth sawcut, with a maximum pay quantity of 10 lineal feet per crossing unless otherwise noted on the Drawings.
2. Curb and gutter damaged by the Contractor during construction operations beyond the limits described above, will be replaced but will not be measured for payment.
3. The repair of adjacent pavement, driveways, sidewalks, and landscaping is included in this item unless specifically identified for separate payment on the Drawings.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per lineal foot for CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (SANITARY).

1.53 PCC SIDEWALK REMOVAL AND REPLACEMENT (SANITARY)

A. Description:
   1. The work of this Pay Item consists of constructing sidewalks to match existing. The following work items are associated with, and shall be considered incidental to this Pay Item:
      a. All quality control testing in accordance with Article 1020.09.
      b. Excavate and dispose of existing materials.
      c. Install 3 inches of compacted Aggregate Base Course.
      d. Form and pour Portland cement concrete sidewalk.
      e. Remove forms and backfill areas adjacent to concrete sidewalk.
      f. Apply protective coat.
   2. Sidewalk damaged by the Contractor during construction operations beyond the limits of the trench will be replaced at no cost to the Owner.

B. Measurement:
   1. Portland Cement Concrete Sidewalk will be measured in place, and the area computed in square feet, up to the limits indicated on the Drawings.
   2. A maximum width of ten lineal feet per crossing will be utilized for pay quantity calculations.

C. Basis of Payment:
   1. This work will be paid for at the Contract Unit Price per square foot for PCC SIDEWALK REMOVAL AND REPLACEMENT (SANITARY) of the material thicknesses indicated in Section 32 10 00.19.

1.54 RESTORATION OF LAWNS AND PARKWAYS (SANITARY)

A. Description:
   1. The work of this Pay Item consists of complete surface restoration of lawns, parkways, and other grassed areas disturbed as a result of the construction, including topsoil, lime, fertilizer, erosion control materials, seeding, and maintenance.

B. Measurement:
   1. The work will be measured in lineal feet along the centerline of the pipe and the area computed in square yards, with a maximum allowable width of 6 feet for main line pipe and maximum width of 6 feet for service pipes.
   2. Areas damaged by or disturbed beyond the work area will be restored at no additional cost to Owner.
   3. Areas damaged or disturbed on private property is incidental and will be restored at no additional cost to the Owner.

C. Basis of Payment:
   1. This work will be paid for at the Contract Unit Price per square yard for RESTORATION OF LAWNS AND PARKWAYS (SANITARY).

1.55 ROCK EXCAVATION (SANITARY)

A. Description:
1. The work of this Pay Item consists of removing and disposing of solid rock.

B. Measurement:
1. The work will be measured in the field and computed in cubic yards.

C. Basis of Payment:
1. The work of this Pay Item will be paid for at the Contract Unit Price per cubic yard of rock removed as ROCK EXCAVATION (SANITARY).

1.56 TREE ROOT PRUNING (SANITARY)

A. Description:
1. The work of this Pay Item consists of root pruning using an approved mechanical root pruning saw prior to excavating around the tree and where indicated on the Drawings or as directed by the Engineer; and in such a manner as to preserve the natural growth habit of each tree complete including an equivalent amount of the top vegetative growth of the plant material within one week following root damage, the application of fertilizer nutrients, and supplemental watering. Root pruning depth to be 12” minimum.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each TREE ROOT PRUNING (SANITARY).

PART C – LEAD SERVICE LINE IMPROVEMENTS

1.57 PROJECT MANAGEMENT (LEAD SERVICE REPLACEMENT)

A. Description:
1. The work of this Pay Item shall include all supervision work associated with coordinating and performing the water service installation at a given property. This item is only applicable when an existing lead service is discovered and where water service work on private property is required. A three hour allotment will be allowed for each property. This work will include contacting the owner, meeting with the property owner to layout the installation, obtaining property owner signature on City agreement form, payment plan, no participation form or sample refusal form, providing City with sketch of proposed and as-built installation, scheduling the work and any follow-up meetings to explain the installation. The workflow is outlined in Appendix C – Lead Service Line Improvements Forms. No additional compensation will be allowed for the management of the project.

2. Photographs or video shall be taken at each property prior to the start of construction work to document the pre-existing conditions.
3. Monthly invoices should provide a breakdown of items and cost per property. Costs associated with preparing this breakdown shall be incidental to the contract.

B. Basis of Payment:
1. This work will be paid for 1 hour for each property where the property declines to participate and for up to 3 hours for each property where a water service is installed on private property. This work will be paid for at the Contract Unit Price per hour for PROJECT MANAGEMENT (LEAD SERVICE REPLACEMENT). No additional compensation will be allowed.

1.58 WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (LEAD SERVICE REPLACEMENT)

A. Description:
1. The work of this Pay Item consists of connecting water service lines to the water mains complete in place, including service saddles; corporation stops; curb stops; service boxes; all required fittings. This item is only applicable when an existing lead service is discovered.
2. The tap into the existing public water main will be performed by the City of Joliet.
3. This Pay Item includes connecting to the curb stop within meter pits, where meter pits are encountered.
4. Water service connection trenches and pits shall be restored at the end of each work day.
5. Notify the City's Public Utilities Department if existing lead water services are discovered.
6. The work of this Pay Item includes all labor, equipment and materials required to remove the top section of existing b-boxes located by the Contractor and as required by the Engineer.
7. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each WATER SERVICE CONNECTION TO WATER MAIN AND CURB STOP (LEAD SERVICE REPLACEMENT) of the service pipe sizes, and the item noted.

1.59 WATER SERVICE LINE TYPE K (LEAD SERVICE REPLACEMENT)

A. Description:
1. The work of this Pay Item shall include furnishing and installing all materials required to lay water service piping in accordance to Sections 41-2.11c and 41-2.12 of the "Standard Specifications for Water and Sewer Construction in Illinois current Edition". The work consists of water service pipe complete

in place, by horizontal directional drilling method and open cut method, including excavation; bracing; bedding and covering of pipe; trench dewatering; trench backfilling with excavated materials; testing; disinfection; finish grading; removal and disposal of waste excavated materials; protection, and replacement or repair of utilities.

2. This item is only applicable when an existing lead service is discovered.
3. Embedment up to one foot above the pipe and earthen backfill shall be included in the cost per lineal foot of water service line
4. Water service will be installed by horizontal directional drilling method under street pavements and for all rear yard service replacements, and open cut methods at connection points to water main and existing service pipe.
5. The open cut method includes backfilling with compacted granular backfill materials.
6. All service lines shall have a minimum depth of 54”, unless otherwise approved by the Engineer.
7. Installing new services in excess of 5 feet of cover in order to cross existing mains, provide for future improvements or cross below sewer lines is considered incidental to the installation of the service, and no addition to the contract will be allowed.
8. The work of this Pay Item includes all labor and equipment required to obtain and submit all real-time utility GIS updates in accordance with DIGITAL UTILITY DATA COLLECTION.

B. Measurement:
   1. The work will be measured in lineal feet along the centerline of the pipe.

C. Basis of Payment:
   1. The work will be paid for at the Contract Unit Price per lineal foot for WATER SERVICE TYPE K – OPEN CUT (LEAD SERVICE REPLACEMENT) or WATER SERVICE LINE TYPE K – DIRECTIONAL DRILLING (LEAD SERVICE REPLACEMENT) of the water service sizes specified.

1.60 WATER SERVICE LINE TYPE L (LEAD SERVICE REPLACEMENT)

A. Description:
   1. This work shall include furnishing and installing all materials required to connect existing interior plumbing to new water service location. All fittings required to complete this work shall be considered incidental.
   2. This item is only applicable when an existing lead service is discovered.

B. Basis of Payment:
   1. The work will be paid for at the Contract Unit Price per lineal foot for WATER SERVICE LINE TYPE L (LEAD SERVICE REPLACEMENT) for the size specified.

1.61 WATER SERVICE CASING PIPE (LEAD SERVICE REPLACEMENT)

A. Description:

1. The work of this Pay Item consists of installing casing pipes for water service pipes to meet water and sewer separation requirements, complete in place by open cut method, including sawcutting, and removal and disposal of existing pavements; excavation; removal and disposal of waste excavated materials; protection, repair or replacement of utilities; trench dewatering, including erosion and sedimentation control methods and devices to provide protection to environment from all pumping operations; installation of casing; installation and support of carrier pipe within casing; sandfilling of void between casing and carrier pipes if noted on Drawings; end seals; backfilling with compacted excavated materials; but not including backfilling with granular backfill materials.
2. This item is only applicable when an existing lead service is discovered.

B. Measurement:

1. The work will be measured in lineal feet for the length of the casing pipe.

C. Basis of Payment:

1. The work will be paid for at the Contract Unit Price per lineal foot for WATER SERVICE CASING PIPE (LEAD SERVICE REPLACEMENT), of the size indicated.

1.62 WATER SERVICE CONNECTION ON PRIVATE PROPERTY – BASEMENT OR CRAWL SPACE (LEAD SERVICE REPLACEMENT)

A. Description:

1. This item shall include furnishing and installing all materials required to connect to the existing water service on interior of home up to the water meter where lead water services are discovered. The Contractor shall core drill the existing foundation wall to allow for penetration by the 1” copper water service pipe. The Contractor shall install a PVC sleeve in the foundation to protect the copper service pipe. The interior and exterior of the cored hole shall be completely sealed with hydraulic cement to prevent water infiltration. The Contractor shall exercise caution to prevent damaging the existing foundation. The Contractor shall be responsible for repairing any damage to the foundation caused by the coring operation. The Contractor shall be responsible for moving and restoring any items on the interior of the home that infringe upon the work. The Contractor is responsible for any modifications to the interior plumbing necessary to install new water service. New interior water shut-off valves (ball valves) shall be installed on either side of meter. If existing meter is determined to be in need of replacement, Contractor shall install new meter provided by City.
2. This item is only applicable when an existing lead service is discovered.

3. The Contractor shall be responsible for removing any debris generated by the work on the interior and exterior of the building and restore the area around the water service as nearly as practicable to its original condition.
4. This work shall also include abandoning the existing water service line in place. The existing plumbing shall be capped.
5. This work shall include all labor, equipment and materials required to excavate and crimp existing water service in order to complete interior water service connection at locations approved by Engineer where both the curb stop and interior shut-off are broken or where curb stop cannot be located. This work will be considered incidental.
6. This work shall consist of the removal and re-erection of fence segments as necessary to complete the work. The fence shall be removed so that all materials considered suitable by the Engineer for future use will be salvaged. The salvaged material shall be stored at locations and in a manner approved by the Engineer. Any of the material having salvage value and which has been damaged by the Contractor, shall be replaced by the Contractor at his/her own expense with new material of the same kind. The salvaged fence shall be re-erected in accordance with Section 664 of the "Standard Specifications". This work will be considered incidental.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each WATER SERVICE CONNECTION ON PRIVATE PROPERTY – BASEMENT OR CRAWL SPACE (LEAD SERVICE REPLACEMENT).

1.63 WATER SERVICE CONNECTION ON PRIVATE PROPERTY – SLAB (LEAD SERVICE REPLACEMENT)

A. Description:
1. This item shall include furnishing and installing all materials required to connect to the existing water service on interior of home up to the water meter where lead water services are discovered. The Contractor shall saw cut and remove a portion of the slab or core drill the slab to allow for penetration by the 1" copper water service pipe at the existing water service location. The Contractor shall install a PVC sleeve in the foundation when restoring the slab to protect the copper service pipe. The interior and exterior of the cored hole shall be completely sealed with hydraulic cement to prevent water infiltration. The Contractor shall exercise caution to prevent damaging the existing foundation. The Contractor shall be responsible for repairing any damage to the foundation caused by the work. The Contractor shall be responsible for moving and restoring any items on the interior of the home that infringe upon the work. The Contractor is responsible for any modifications to the interior plumbing necessary to install new water service. New interior water shut-off valves (ball valves) shall be installed on either side of meter. If existing meter is determined to be in need of replacement, Contractor shall install new meter provided by City.

2. This item is only applicable when an existing lead service is discovered.
3. The Contractor shall be responsible for removing any debris generated by the work on the interior and exterior of the building and restore the area around the water service as nearly as practicable to its original condition.
4. This work shall also include abandoning the existing water service line in place. The existing plumbing shall be capped.
5. This work shall include all labor, equipment and materials required to excavate and crimp existing water service in order to complete interior water service connection at locations approved by Engineer where both the curb stop and interior shut-off are broken or where curb stop cannot be located. This work will be considered incidental.
6. This work shall consist of the removal and re-erection of fence segments as necessary to complete the work. The fence shall be removed so that all materials considered suitable by the Engineer for future use will be salvaged. The salvaged material shall be stored at locations and in a manner approved by the Engineer. Any of the material having salvage value and which has been damaged by the Contractor, shall be replaced by the Contractor at his/her own expense with new material of the same kind. The salvaged fence shall be re-erected in accordance with Section 664 of the "Standard Specifications". This work will be considered incidental.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each WATER SERVICE CONNECTION ON PRIVATE PROPERTY – SLAB (LEAD SERVICE REPLACEMENT).

1.64 UTILITY LOCATION – PRIVATE PROPERTY (LEAD SERVICE REPLACEMENT)

A. Description:
1. This work shall include all labor, equipment and materials associated with locating the existing water and sewer services on private property. Where locates are not provided for the water service, sewer service, or buffalo box, the Contractor shall complete locating services for means of installing new service line.
2. This item is only applicable when an existing lead service is discovered.

B. Basis of Payment:
1. The work will be paid for at the Contract Unit Price for each UTILITY LOCATION – PRIVATE PROPERTY (LEAD SERVICE REPLACEMENT).

1.65 WATER METER RELOCATION (LEAD SERVICE REPLACEMENT)

A. Description:
1. This work shall include all labor and materials required to relocate existing water meter to new water service entry point into home. Meter shall be located immediately upon entrance of the service pipe into the home approximately 3' off the ground. Meter shall be installed such that it is

accessible for maintenance. Contractor to provide and install new shut-off valves (ball valves) on each side of the meter, drain connection between two shut-off valves, and #4 solid copper grounding wire between upstream and downstream with bronze ground clamps. Contractor shall install AMR wire to outside face of building. AMR (Automated Meter Reading) wire will be provided to Contractor by City. City staff will relocate AMR.

2. This pay item is only applicable when new water service location is required and when an existing lead service is discovered.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price for each WATER METER RELOCATION (LEAD SERVICE REPLACEMENT).

1.66 WATER METER REPLACEMENT (LEAD SERVICE REPLACEMENT)

A. Description:

1. This work shall include all labor and materials required to replace existing water meter to new water service entry point into home. Meter shall be located immediately upon entrance of the service pipe into the home approximately 3’ off the ground. Meter shall be installed such that it is accessible for maintenance. Contractor to provide and install new shut-off valves (ball valves) on each side of the meter, drain connection between two shut-off valves, and #4 solid copper grounding wire between upstream and downstream with bronze ground clamps. Contractor shall install AMR wire to outside face of building. AMR (Automated Meter Reading) wire will be provided to Contractor by City. City staff will relocate AMR.
2. Ally, iPERL, and Accustream meters with digital LCD readers should not be replaced. Accustream meters with ICE register may be replaced only if not programmed for 8-digit read (see Appendix C, Section 7). All brass type meters encountered shall be replaced.
3. This item is only applicable when an existing lead service is discovered.

B. Basis of Payment:

1. The work will be paid for at the Contract Unit Price for each WATER METER REPLACEMENT (LEAD SERVICE REPLACEMENT).

1.67 LANDSCAPING PROJECT MANAGEMENT (LEAD SERVICE REPLACEMENT)

A. Description:

1. The work of this Pay Item shall include the Contract meeting with each homeowner prior to any work being performed on private property in order the make the homeowner aware of the area(s) to be disturbed and the impact to the landscaping. Contractor shall explain the homeowner’s options for restoration of landscaping. Homeowners will be offered a $450 allowance to accept the basic restoration and complete the final landscaping on their own. If homeowners accept this option, the Contractor is to secure waivers provided by the City from the residents and submit

application forms to the City on the owner's behalf. Alternatively, the homeowner can request the Contractor complete the landscaping.

2. This item is only applicable when an existing lead service is discovered.

B. Basis of Payment:

1. This work will be paid for as 2 hours for each home where a water service is installed on private property at the contract unit price per hour for LANDSCAPING PROJECT MANAGEMENT (LEAD SERVICE REPLACEMENT). No additional compensation will be allowed.

1.68 LANDSCAPING RESTORATION ALLOWANCE (LEAD SERVICE REPLACEMENT)

A. Description:

1. This work shall include all cost to restore the disturbed area at each location to its original condition. The contractor shall salvage existing materials to reuse or provide new materials to match the existing. The contractor shall protect all landscaping to be salvaged until the material is transplanted.
2. This item is only applicable when an existing lead service is discovered.
3. An allowance of $450 is provided to perform the necessary restoration at each area of disturbance. Itemized bills for each location shall be submitted. Locations requiring an overrun of the $450 allowance shall be approved by the city before work proceeds. The landscaper shall have the flexibility to restore the landscaping or change the surrounding area within the cost allowance as directed by the homeowner. Multiple bushes can be planted in replacement for single bushes.
4. Lawn Restoration will be incidental to the project. The contractor shall take every measure to protect the existing lawn by laying work mats or plywood sheathing. Damage caused by the contractor will be restored at the contractor's expense. Restoration will consist of raking in pulverized topsoil (minimum of 3"), over seeding the disturbed areas and installing blanket or straw netting.
5. No additional compensation will be allowed for replacement of dead vegetation or call backs due to the ground settling. The General Contractor shall ensure that all parties perform the work in a workmanlike manner in order to prevent claims for these items and other foreseeable items.
6. Modifications to the existing landscaping requested by the homeowner will be allowed under this contract. Additional work requested by the homeowner will be paid directly by the homeowner. The contract unit price will be deducted from the contract. Separate payment will be made to the landscaping contractor as an allowance to cover the City's obligation to restore the area. The homeowner and contractor shall submit to the City a Notice of Intent (Contractor's Proposal Form) to have the landscaping modified prior to this work being performed along with a waiver from the homeowner. The City of Joliet will be released from any claims or disputes between the Landscaper and Homeowner.
7. This contract shall include the option to owners to receive a 'LANDSCAPING CREDIT' or cash allowance from the City of $450.00 to perform any restoration on their own. For any residence electing to receive

the Landscaping Credit, the owner of the property gives up any claim against the contractor or City for landscaping, whether existing or replaced, which dies. A release form will be provided by the City for the owner to sign. Restoration at the location will be limited to compacting and leveling disturbed areas and placing grass seed in lawn areas. The Contractor shall secure the owners' signature on the release and submit to the City prior to the Credit being issued.

B. Basis of Payment:
   1. This work will be paid for as LANDSCAPING RESTORATION ALLOWANCE (LEAD SERVICE REPLACEMENT) not to exceed the contract allowance amount of $450. Payment will be made after the work is completed or the terms of the homeowner agreement are completed.

1.69 SHRUB AND BRUSH DISPOSAL (LEAD SERVICE REPLACEMENT)

A. Description:
   1. The work of this Pay Item shall include removal and disposal of shrubs and bushes from private property in order to install new water services.
   2. This item is only applicable when an existing lead service is discovered.

B. Basis of Payment:
   1. The work will be paid for per location at the contract unit price each for SHRUB AND BRUSH DISPOSAL LEAD SERVICE REPLACEMENT).

1.70 HOT-MIX ASPHALT REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT)

A. Description:
   1. The work of this Pay Item consists of replacing street pavement that has been removed as part of the lead water service replacement work. This item is only applicable when an existing lead service is discovered. Restoration will consist of hot-mix asphalt binder course and hot-mix asphalt surface course of the thicknesses specified, installed within the trench limits to match the existing surface. The following items are associated with and shall be considered incidental to this Pay Item:
      a. All quality control testing in accordance with Article 1030.05(d).
      b. Prime coat applications.
      c. Sawcutting to provide clean, straight edges is mandatory, regardless of the number of times required.
      d. The thickness to be used are 2.5-inch binder and 1.5-inch surface course.

B. Measurement:
   1. Street restoration of trenches will be measured in place and the area computed in square yards.
      a. The length will be measured down the centerline of the pipe.

b. All areas disturbed shall be restored, but the maximum allowable trench widths used for pay quantity calculations will be 6 feet centered on the pipe. If the Contractor chooses to relocate the trench farther away from the curb and gutter, the pavement patch will extend from the sawcut in the existing pavement to the face of the gutter and the maximum allowable width of 6 feet will be used for pay quantity calculations. If the Owner or Engineer relocates the trench away from the curb and gutter, additional quantities will be calculated based on the actual trench width as approved by the Engineer.

C. Basis of Payment:

1. The street pavement restoration at water main and sewer trenches will be paid for at the Contract unit price per square yard of the thicknesses indicated as HOT-MIX ASPHALT REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT).

1.71 HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT)

A. Description:

1. The work of this Pay Item consists of constructing hot-mix asphalt driveway aprons to match current City standards. This item is only applicable when an existing lead service is discovered. The following work items are associated with and shall be considered incidental to, this Pay Item:
   a. All quality control testing in accordance with Article 1030.05(d).
   b. Excavate and dispose of existing subgrade material to proposed subgrade elevation.
   c. Prepare Subgrade.
   d. Replace steel edging if applicable.
   e. Install minimum 3” aggregate Base Course.
   f. Install 1.5-inch hot-mix asphalt base for driveways.
   g. Install Bituminous Materials (Prime Coat).
   h. Place hot-mix asphalt Surface Course, (1.5-inch compacted depth).
   i. Utilize driveway mix for Surface Course if so directed by Engineer.

B. Measurement:

1. Driveway removal and replacement will be measured in place prior, and the area computed in square yards.
2. Additional quantities of driveway, subbase, or subgrade removed due to neglect by the Contractor, as determined by the Engineer, will not be measured for payment.

C. Basis of Payment:

1. This work will be paid for at the Contract Unit Price per square yard for HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT) of the thickness indicated in the Specifications.

1.72 PCC DRIVEWAY REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT)

A. Description:

1. The work of this Pay Item consists of constructing Portland Cement Concrete driveway and subgrade as directed by the Engineer. This item is only applicable when an existing lead service is discovered. The following work items are associated with, and shall be considered incidental to, this Pay Item:
    a. All quality control testing in accordance with Article 1020.09.
    b. Excavate and dispose of existing subgrade material to proposed subgrade elevation.
    c. Prepare Subgrade.
    d. Replace steel edging if applicable.
    e. Install minimum 3” aggregate Base Course.
    f. Install 6 x 6-W4.0 x W4.0 welded wire fabric.
    g. Install Portland Cement Concrete.
    h. Apply Protective Coat.

B. Measurement:

1. Driveway removal and replacement will be measured in place, and the area computed in square yards.
2. Additional quantities of driveway, subbase, or subgrade removed due to neglect by the Contractor, as determined by the Engineer, will not be measured for payment.

C. Basis of Payment:

1. This work will be paid for at the Contract Unit Price per square yard for PCC DRIVEWAY REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT).

1.73 CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT)

A. Description:

1. The work of this Pay Item consists of constructing concrete curb and gutter of the type indicated. This item is only applicable when an existing lead service is discovered. The following work items are associated with, and shall be considered incidental to, this Pay Item.
    a. All quality control testing in accordance with Article 1020.09.
    b. Sawcut existing curb and gutter, including steel reinforcement.
    c. Break, remove, and dispose of existing curb and gutter.
    d. Prepare aggregate Base Course below curb and gutter.
    e. Install Combination Concrete Curb and Gutter.
    f. Install all expansion joints, contraction joints, slip dowels, and tie bars.
    g. Install Protective Coat.
    h. Provide handicap ramps at sidewalks and depressed curb at driveways.

B. Measurement:
1. Curb and Gutter Removal and Replacement will be measured in lineal feet along the flow line of the gutter from full-depth sawcut to full-depth sawcut, with a maximum pay quantity of 10 lineal feet per crossing unless otherwise noted on the Drawings.
2. Curb and gutter damaged by the Contractor during construction operations beyond the limits described above, will be replaced but will not be measured for payment.
3. The repair of adjacent pavement, driveways, sidewalks, and landscaping is included in this item unless specifically identified for separate payment on the Drawings.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per lineal foot for CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT).

1.74 PCC SIDEWALK REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT)

A. Description:
1. The work of this Pay Item consists of constructing sidewalks to match existing. This item is only applicable when an existing lead service is discovered. The following work items are associated with, and shall be considered incidental to this Pay Item:
a. All quality control testing in accordance with Article 1020.09.
b. Excavate and dispose of existing materials.
c. Install 3 inches of compacted Aggregate Base Course.
d. Form and pour Portland cement concrete sidewalk.
e. Remove forms and backfill areas adjacent to concrete sidewalk.
f. Apply protective coat.
2. Sidewalk damaged by the Contractor during construction operations beyond the limits of the trench will be replaced at no cost to the Owner.

B. Measurement:
1. Portland Cement Concrete Sidewalk will be measured in place, and the area computed in square feet, up to the limits indicated on the Drawings.
2. A maximum width of ten lineal feet per crossing will be utilized for pay quantity calculations.

C. Basis of Payment:
1. This work will be paid for at the Contract Unit Price per square foot for PCC SIDEWALK REMOVAL AND REPLACEMENT (LEAD SERVICE REPLACEMENT) of the material thicknesses indicated in Section 32 10 00.19.

(02/22)

1.75 RESTORATION OF LAWNS AND PARKWAYS (LEAD SERVICE REPLACEMENT)

A. Description:
   1. The work of this Pay Item consists of complete surface restoration of lawns, parkways, and other grassed areas disturbed as a result of the construction, including topsoil, lime, fertilizer, erosion control materials, seeding, and maintenance.
   2. This item is only applicable when an existing lead service is discovered.

B. Measurement:
   1. The work will be measured in lineal feet along the centerline of the pipe and the area computed in square yards, with a maximum allowable width of 6 feet for main line pipe and maximum width of 6 feet for service pipes.
   2. Areas damaged by or disturbed beyond the work area will be restored at no additional cost to Owner.
   3. Areas damaged or disturbed on private property is incidental and will be restored at no additional cost to the Owner.

C. Basis of Payment:
   1. This work will be paid for at the Contract Unit Price per square yard for RESTORATION OF LAWNS AND PARKWAYS (LEAD SERVICE REPLACEMENT).

END OF SECTION

Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Source Site Certification
by Owner or Operator
for Use of Uncontaminated Soil as Fill in a
CCDD or Uncontaminated Soil Fill Operation
LPC-662

Revised in accordance with 35 Ill. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by source site owners and operators to certify, pursuant to 35 Ill. Adm. Code 1100.205(a)(1)(A), that soil (i) was removed from a site that is not potentially impacted property and is presumed to be uncontaminated soil and (ii) is within a pH range of 6.25 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Sectior at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris fill operations or uncontaminated soil fill operations.

I. Source Location Information

(Describe the location of the source of the uncontaminated soil)

Project Name: St. Pats Area Watermain Office Phone Number, if available:

Physical Site Location (Street, Road): Various Streets - See Attached Aerial & Map

City: Joliet State: IL Zip Code: 60431 County: Will

Township: Joliet

Lat/Long of approximate center of site in decimal degrees (DD.ddddd) to five decimal places (e.g., 40.67890, -90.12345):

Latitude: 41.52033 (Decimal Degrees) Longitude: - 88.09548 (-Decimal Degrees)

Identify how the lat/long data were determined:

○ GPS ⊘ Map Interpolation ○ Photo Interpolation ○ Survey ○ Other

IEPA Site Number(s), if assigned: BOL: BOW: BOA:

Approximate Start Date (mm/dd/yyyy): Approximate End Date (mm/dd/yyyy):

Estimated Volume of debris (cu. Yd.):

II. Owner/Operator Information for Source Site

Site Owner		Site Operator	
Name:	City of Joliet	Name:	City of Joliet
Street Address:	150 W. Jefferson St	Street Address:	150 W. Jefferson St
PO Box:		PO Box:	
City:	Joliet State: IL	City:	Joliet State: IL
Zip Code:	60431 Phone: (815) 724-4200	Zip Code:	60431 Phone: (815) 724-4200
Contact:	Greg Ruddy	Contact:	Greg Ruddy
Email, if available:		Email, if available:	

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed $50,000 for the violation and an additional civil penalty of not to exceed $10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms Management Center.

Project Name: St. Pats Area Watermain Latitude: 41.52033 Longitude: -88.09548

Source Site Certification

III. Descriptions of Current and Past Uses of Source Site

Describe the current and past uses of the site and nearby properties.* Attach additional information as needed. The description must take into account, at a minimum, the following for the source site and for nearby property: (1) use of the properties for commercial or industrial purposes; (2) the use, storage or disposal of chemical or petroleum products in individual containers greater than 5 gallons or collectively more than 50 gallons; (3) the current or past presence of any storage tanks (above ground o underground); (4) any waste storage, treatment or disposal at the properties; (5) any reported releases or any environmental cleanup or removal of contaminants; (6) any environmental liens or governmental notification of environmental violations; (7) any contamination in a well that exceeds the Board's groundwater quality standards; (8) the use, storage, or disposal of transformers or capacitors manufactured before 1979; and (9) any fill dirt brought to the properties from an unknown source or site.

Number of pages attached: 48

The site is a residential area. Surrounding properties are residential. No known chemical storage, waste storage, environmental liens, contaminated wells or any potentially impacted properties are present on or adjacent to construction area. Data review of IEPA databases did not indicate site contains PIPs. Performed 12 soil borings and boring logs are attached. Soil samples were obtained and PID readings did not indicate volatile organic contamination issues. Materials certified herewith as CCDD material must be free of rebar, garbage, etc. and any said materials must be segregated from CCDD materials and disposed of in other legal means.

*The description must be sufficient to demonstrate that the source site is not potentially impacted property, thereby allowing the source site owner or operator to provide this certification.

IV. Soil pH Testing Results

Describe the results of soil pH testing showing that the soil pH is within the range of 6.25 to 9.0 and attach any supporting documentation.

Number of pages attached: 1

pH test results within MAC requirements.

V. Source Site Owner, Operator or Authorized Representative's Certification Statement and Signature

In accordance with the Illinois Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I Don Cassier (owner, operator or authorized representataive of source site) certify that this site is not a potentially impacted property and the soil is presumed to be uncontaminated soil. I also certify that th soil pH is within the range of 6.25 to 9.0. I further certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. Additionally, I certify that I am either the site owner or operator or a duly authorized representative of the site owner or site operator and am authorized to sign this form. Furthermore, I certify that all information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

○ Owner
○ Operator
◉ Owner's Duly Authorized Representative
○ Operator's Duly Authorized Representative

Don Cassier
Printed Name

Nov 11, 2022
Date

Signature


St. Pats Watermain
Write a description for your map.
Legend
RIVER BLUFFS
Holy Temple Christian Church
Richmond St
Oneida St
Clement St
Wilcox St
N Prairie Ave
N Raynor Ave
Carnitas estilo Michoacan
W Jefferson St
Wendy's
M & M Autocrafts
Victory Centre of Joliet
Saint Patricks Cemetery
Home Cut Donuts, Inc
Mariscos El Pulpo
sp7
W Washington St
sp1
sp6
Irene St
N Hickory St
N Bluff St
Des Plaines River
Lafayette St
S Cagwin Ave
The Haley Mansion
Housing Authority of Joliet
Blackman Ave
sp5
sp8
W Marion St
S Seeser St
KS Joliet Real Estate Attorney
sp2
St. Patrick's Church
Grand Blvd
sp9
Prior St
S Comstock St
Beach St
sp3
Madeline St
S Willow Ave
sp10
W Allen St
S Illinois St
D. Bravo Auto Repair
sp12
Pleasant St
S Center St
CMC America
REC Weighing Technology
Hyde Park Ave
52
sp11
sp4
Ramos asphalt sealcoat
Morgan St
Prairie Creek Grain
Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Jonez family childcare
N
1000 ft

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-1**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2} (1 2 3 4 5)

PL MC LL

STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm	REMARKS
		HS			7" BITUMINOUS CONCRETE PAVEMENT		
					5" SAND AND GRAVEL BASE COURSE, Brown		
	1	SS	67		FILL: CRUSHED STONE, And Brown Sand (A-1-a)	0	
2.5		HS					
	2	SS	44		FILL: CLAY, Brown and Gray, Some Black Clay, Trace Sand and Gravel, Medium, Moist	0	
5.0		HS					
	3A				SILTY CLAY, Brown, Trace Dark Brown, Trace Sand and Gravel, Medium, Moist	0	
	3B	SS	33		(A-6)	0	
7.5		HS			APPARENT DOLOMITE LIMESTONE BEDROCK, Tan, Highly Weathered		
	4	SS	11			0	
10.0					End of Boring at 10 Feet		SPT N: 107 Blows/12" Refusal
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm. 2. The apparent to of weathered limestone bedrock is approximately 6.5 feet below the exisiting grade level and the apparent top of solid limestone bedrock is approximately 10 feet below the exisiting grade level.		
15.0							
17.5							

57

107

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations			SEECO Consultants, Inc. 7350 Duvan Drive, Tinley Park, IL 60477			Boring Started	9/8/22	
W.L.						Boring Completed	9/8/22	
W.L.	Dry WS/WD	Dry ACR				Driller	EN	Rig D-50
W.L.			Approved	CWG	Job No. 13120G	Drawn By	SW	Sheet 1 of 1

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-2**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2} (1 2 3 4 5)

PL MC LL

STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm	REMARKS
		HS			5.25" BITUMINOUS CONCRETE PAVEMENT 6.75" SAND AND GRAVEL BASE COURSE, Brown		
	1	SS	61		FILL: CRUSHED STONE, Medium Dense, Dry (A-1-a)	0	
2.5		HS					
	2	SS	22		FILL: CLAYEY GRAVEL, Light Brown and Gray, Trace Sand, Dense, Moist (A-1-b)	0	
5.0		HS					
	3	SS	11		APPARENT DOLOMITE LIMESTONE BEDROCK, Tan, Highly Weathered	0	75
7.5		HS					
	4	SS	11			0	103 SPT N=103 Blows/12" Refusal
10.0					End of Boring at 10 Feet		
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm. 2. The apparent top of weathered limestone bedrock is approximately 5.5 feet below the exisiting grade level and the apparent top of solid limestone bedrock is approximately 10 feet below the exisiting grade level.		
15.0							
17.5							

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations					
W.L.					
W.L.	Dry WS/WD	Dry ACR			
W.L.					

SEECO Consultants, Inc.
7350 Duvan Drive, Tinley Park, IL 60477

Boring Started	9/9/22				
Boring Completed	9/9/22				
Driller	EN	Rig	D-50		
Approved	CWG	Job No.	13120G	Drawn By	SW
Sheet	1 of 1				

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-3**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2} (1, 2, 3, 4, 5)

STD "N" PENETRATION BLOWS PER FT. (10, 20, 30, 40, 50)

PL MC LL

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS	OVM ppm	REMARKS
		HS			4" BITUMINOUS CONCRETE PAVEMENT 8" SAND AND GRAVEL BASE COURSE, Brown		
	1	SS	78		FILL: SILTY SAND, Dark Brown, and Black, Trace Gravel, Trace Black Cinders, Dense, Dry	0	
2.5		HS					
	2	SS	33		FILL: GRAVEL, Light Brown, Contains Cobbles, Dense (A-1-a)	0	
5.0		HS					
	3	SS	22		APPARENT DOLOMITE LIMESTONE BEDROCK, Light Brown, Highly Weathered	0	71
7.5		HS					
	4	SS	17			0	94
10.0					End of Boring at 10 Feet		SPT N= 94 Blows/12" Refusal
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm. 2. The apparent top of weathered limestone bedrock is approximately 6 feet below the exisiting grade level and the apparent top of solid limestone bedrock is approximately 10 feet below the exisiting grade level.		
15.0							
17.5							

Calibrated Penetrometer Unconfined Compression

Water Level Observations			SEECO Consultants, Inc.			Boring Started	9/9/22		
W.L.						Boring Completed	9/9/22		
W.L.	Dry WS/WD	Dry ACR	7350 Duvan Drive, Tinley Park, IL 60477			Driller	EN	Rig	D-50
W.L.			Approved	CWG	Job No. 13120G	Drawn By	SW	Sheet	1 of 1

BORING LOG

CLIENT: City of Joliet

PROJECT: 2023 St. Pat's Phase 1 Water Main Improvements

OWNER: City of Joliet

LOCATION: Joliet, IL

BORING NUMBER: SP-4

APPROX. SURFACE ELEVATION (M.S.L.): +/-

STATION:

OFFSET from CL:

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2}: 1 2 3 4 5

PL MC LL

STD "N" PENETRATION BLOWS PER FT.: 10 20 30 40 50

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	OVM ppm	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	REMARKS
		HS			4.75" BITUMINOUS CONCRETE PAVEMENT	
					8" SAND AND GRAVEL BASE COURSE, Brown	
	1	SS	56	0	FILL: SAND, Dark Brown, Trace Brown, Trace Black, Trace Gravel, Dense, Dry (A-3)	
2.5		HS				
	2	SS	72	0		
5.0		HS				
	3A	SS	44	0	APPARENT DOLOMITE LIMESTONE BEDROCK, Light Brown, Highly Weathered	
	3B			0		
7.5		HS				
	4	SS	17	0		
10.0					End of Boring at 10 Feet	81 SPT N=81 Blows/12" Refusal

Note:

1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm.

2. The apparent top of weathered limestone bedrock is approximately 6.5 feet below the exisiting grade level and the apparent top of solid limestone bedrock is approximately 10 feet below the exisiting grade level.

12.5

15.0

17.5

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations			SEECO Consultants, Inc.			Boring Started	9/9/22		
W.L.						Boring Completed	9/9/22		
W.L.	Dry WS/WD	Dry ACR	7350 Duvan Drive, Tinley Park, IL 60477			Driller	EN	Rig	D-50
W.L.			Approved	CWG	Job No. 13120G	Drawn By	SW	Sheet	1 of 1

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-5**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

Unconfined Compressive Strength, Tons/Ft.^{2} (1 2 3 4 5)

PL MC LL

STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm	REMARKS
		HS			5.5" BITUMINOUS CONCRETE PAVEMENT 7.5" SAND AND GRAVEL BASE COURSE, Brown		
	1	SS	83		FILL: CLAY, Brown, Gray, Some Black, Trace Dark Brown, Trace Sand and Gravel, Stiff, Moist	0	
2.5		HS					
	2	SS	39		FILL: COURSE GRAVEL, Trace Black Silty Clay, Dense (Hit Rock Piece at 5 Feet)	0	
5.0		HS					
	3	SS	33		CLAY, Brown, Trace Sand and Gravel, Hard, Moist (A-6)	0	
7.5		HS					
	4	SS	89			0	
10.0					End of Boring at 10 Feet Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm.		
12.5							
15.0							
17.5							

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations			SEECO Consultants, Inc.			Boring Started	9/9/22	
W.L.						Boring Completed	9/9/22	
W.L.	Dry WS/WD	Dry ACR	7350 Duvan Drive, Tinley Park, IL 60477			Driller	EN	Rig D-50
W.L.			Approved	CWG	Job No. 13120G	Drawn By	SW	Sheet 1 of 1

BORING LOG

CLIENT **City of Joliet**	PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**
OWNER **City of Joliet**	LOCATION **Joliet, IL**

BORING NUMBER **SP-6**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm
		HS			3" BITUMINOUS CONCRETE PAVEMENT FILL: 7" CRUSHED STONE	
	1	SS	61		FILL: SAND, Black, Trace Gravel, Contain Slag Pieces, Medium Dense, Moist	0
2.5		HS				
	2	SS	83			0
5.0		HS				
	3	SS	72		FILL: CLAY, Dark Brown, Trace Brown, Some Gray, Trace Sand and Gravel, Trace Black Cinders, Medium, Moist (A-6)	0
7.5		HS				
	4	SS	56		SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Very Stiff, Moist (A-6)	0
10.0					End of Boring at 10 Feet	
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm.	
15.0						
17.5						

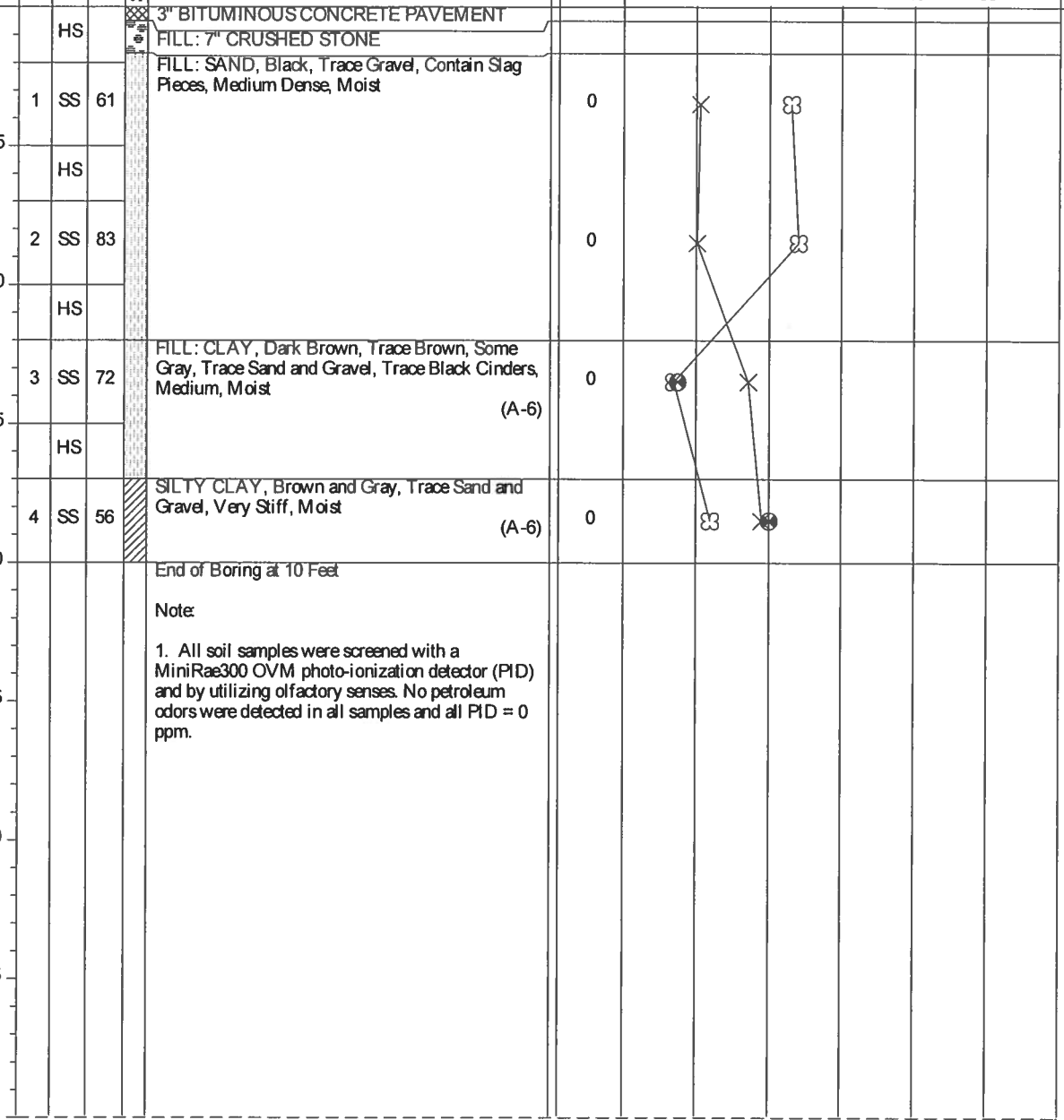
Unconfined Compressive Strength, Tons/Ft.^{2}

1 2 3 4 5

PL MC LL

STD "N" PENETRATION BLOWS PER FT.

10 20 30 40 50



⊗ Calibrated Penetrometer Unconfined Compression

REMARKS

Water Level Observations		
W.L.		
W.L.	Dry WS/WD	Dry ACR
W.L.		

SEECO Consultants, Inc.
7350 Duvan Drive, Tinley Park, IL 60477

Approved **CWG** Job No. **13120G**

Boring Started	**9/8/22**
Boring Completed	**9/8/22**
Driller **EN**	Rig **D-50**
Drawn By **SW**	Sheet **1 of 1**

BORING LOG

CLIENT: City of Joliet

PROJECT: 2023 St. Pat's Phase 1 Water Main Improvements

OWNER: City of Joliet

LOCATION: Joliet, IL

BORING NUMBER: SP-7

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm
		HS			5" BITUMINOUS CONCRETE PAVEMENT	
					8" SAND AND GRAVEL BASE COURSE, Brown	
	1	SS	78		FILL: CLAY, Brown and Gray, Trace Dark Brown, Some Black, Trace Sand and Gravel, Stiff, Moist (A-6)	0
2.5		HS				
	2	SS	56		FILL: SAND, Black, Trace Gravel, Contain Slag Pieces, Medium Dense, Moist to Dry	10
5.0		HS				
	3	SS	67			3
7.5		HS				
	4	SS	83			4
10.0					End of Boring at 10 Feet	
					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. Petroleum odors were detected in sample 2, 3, and 4 with highest PID = 10ppm.	
12.5						
15.0						
17.5						

Unconfined Compressive Strength, Tons/Ft.^{2}

1 2 3 4 5

PL MC LL

STD "N" PENETRATION BLOWS PER FT.

10 20 30 40 50

REMARKS

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations		
W.L.		
W.L.	Dry WS/WD	Dry ACR
W.L.		

SEECO Consultants, Inc.
7350 Duvan Drive, Tinley Park, IL 60477

Approved: CWG | Job No.: 13120G

Boring Started	9/8/22
Boring Completed	9/8/22
Driller: EN	Rig: D-50
Drawn By: SW	Sheet: 1 of 1

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-8**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2} (1 2 3 4 5)

PL MC LL

STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm	REMARKS
		HS			6" BITUMINOUS CONCRETE PAVEMENT		
					9" CRUSHED STONE BASE COURSE		
	1	SS	78		FILL: SILTY CLAY, Brown and Gray, Trace Dark Brown, Trace Sand and Gravel, Very Stiff, Moist (A-6)	0	
2.5		HS					
	2	SS	78		SILTY CLAY, Brown and Gray, Trace Sand And Gravel, Hard, Moist (A-6)	0	
5.0		HS					
	3	SS	89			0	
7.5		HS					
	4	SS	89			0	
10.0					End of Boring at 10 Feet		
12.5					Note: 1. Boring was offset approximately 4 feet west and 5 feet south from the original location due to the existing underground utilities 2. All soil samples were screened with aMiniRae300 OVM photo-ionization detector (PID)and by utilizing olfactory senses. No petroleumodors were detected in all samples and all PID = 0ppm.		
15.0							
17.5							

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations			SEECO Consultants, Inc.			Boring Started	9/19/22	
W.L.						Boring Completed	9/19/22	
W.L.	Dry WS/WD	Dry ACR	7350 Duvan Drive, Tinley Park, IL 60477			Driller	EN	Rig D-50
W.L.			Approved	CWG	Job No. 13120G	Drawn By	SW	Sheet 1 of 1

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-9**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2} (1 2 3 4 5)

PL MC LL

STD "N" PENETRATION BLOWS PER FT. (10 20 30 40 50)

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm	REMARKS
		HS			5" BITUMINOUS CONCRETE PAVEMENT		
					FILL: 8" CRUSHED STONE		
	1	SS	89		SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Hard, Moist (A-6)	0	
2.5		HS					
	2	SS	61			0	
5.0		HS					
	3	SS	44		SILTY CLAY, Brown, Trace Gray, Trace Sand and Gravel, Hard, Moist (A-6)	0	
7.5		HS			SILTY CLAY, Brown, Trace Sand and Gravel, Hard, Moist (A-6)		
	4	SS	56			0	
10.0					End of Boring at 10 Feet		
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm.		
15.0							
17.5							

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations			SEECO Consultants, Inc.			Boring Started	9/8/22		
W.L.						Boring Completed	9/8/22		
W.L.	Dry WS/WD	Dry ACR	7350 Duvan Drive, Tinley Park, IL 60477			Driller	EN	Rig	D-50
W.L.			Approved	CWG	Job No. 13120G	Drawn By	SW	Sheet	1 of 1

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-10**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm
		HS			5" BITUMINOUS CONCRETE PAVEMENT	
					7" SAND AND GRAVEL BASE COURSE, Brown	
	1A	SS	89		FILL: CRUSHED STONE, Trace Gravel, Medium Dense, Dry	
	1B				FILL: CLAY, Dark Brown, Trace Black, Trace Brown, Trace Sand and Gravel, Medium, Moist (A-6)	0
2.5		HS				
	2	SS	61		FILL: CLAY, Gray, Trace Black, Trace Sand and Gravel, Medium, Moist (A-6)	0
5.0		HS				
	3	SS	44		CLAY, Brown and Gray, Trace Sand and Gravel, Hard, Moist (A-6)	0
7.5		HS			CLAY, Brown, Trace Sand and Gravel, Hard, Moist (A-6)	
	4	SS	56			0
10.0					End of Boring at 10 Feet	
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm.	
15.0						
17.5						

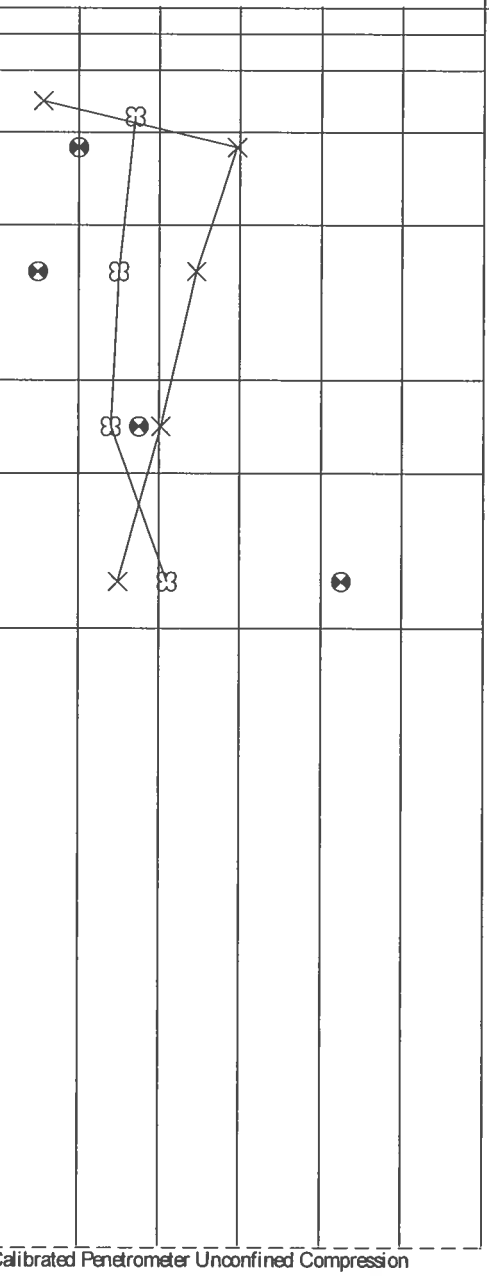
Unconfined Compressive Strength, Tons/Ft.^{2}

1 2 3 4 5

PL MC LL

STD "N" PENETRATION BLOWS PER FT.

10 20 30 40 50



⊗ Calibrated Penetrometer Unconfined Compression

REMARKS

Water Level Observations

W.L.

W.L. **Dry WS/WD** **Dry ACR**

W.L.

SEECO Consultants, Inc.

7350 Duvan Drive, Tinley Park, IL 60477

Approved **CWG** Job No. **13120G**

Boring Started **9/9/22**

Boring Completed **9/9/22**

Driller **EN** Rig **D-50**

Drawn By **SW** Sheet **1 of 1**

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-11**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2} (1, 2, 3, 4, 5)

PL | MC | LL

STD "N" PENETRATION BLOWS PER FT. (10, 20, 30, 40, 50)

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm	REMARKS
		HS			5" BITUMINOUS CONCRETE PAVEMENT		
					8" SAND AND GRAVEL BASE COURSE, Brown		
	1	SS	78		SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Very Stiff, Moist (A-6)	0	
2.5		HS					
	2	SS	61		SILTY CLAY, Brown, Trace Sand and Gravel, Hard, Moist (A-6)	0	
5.0		HS					
	3	SS	83			0	
7.5		HS					
	4	SS	44			0	
10.0					End of Boring at 10 Feet		
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm. 2. Boring was offset approximately 4 feet East from original location due to the underground lines		
15.0							
17.5							

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations		
W.L.		
W.L.	Dry WS/WD	Dry ACR
W.L.		

SEECO Consultants, Inc.
7350 Duvan Drive, Tinley Park, IL 60477

Approved CWG | Job No. 13120G

Boring Started	9/9/22
Boring Completed	9/9/22
Driller EN	Rig D-50
Drawn By SW	Sheet 1 of 1

BORING LOG

CLIENT **City of Joliet**

PROJECT **2023 St. Pat's Phase 1 Water Main Improvements**

OWNER **City of Joliet**

LOCATION **Joliet, IL**

BORING NUMBER **SP-12**

APPROX. SURFACE ELEVATION (M.S.L.) +/-

STATION | OFFSET from CL

DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)

Unconfined Compressive Strength, Tons/Ft.^{2} (1, 2, 3, 4, 5)

PL | MC | LL

STD "N" PENETRATION BLOWS PER FT. (10, 20, 30, 40, 50)

DEPTH ELEVATION	SAMPLE NO.	SAMPLER TYPE	SAMPLE REC. (%)	SOIL GRAPHIC LOG	DESCRIPTION OF MATERIALS (LABORATORY CLASSIFICATION)	OVM ppm	REMARKS
		HS			4.75" BITUMINOUS CONCRETE PAVEMENT 8" CRUSHED STONE		
	1	SS	56		FILL: CLAY, Brown and Gray, Some Black, Trace Sand and Gravel, Trace Wood, Stiff, Moist	0	
2.5		HS					
	2	SS	89		SILTY CLAY, Brown and Gray, Trace Sand and Gravel, Very Stiff to Hard, Moist (A-6)	0	
5.0		HS					
	3	SS	67			0	
7.5		HS					
	4	SS	83			0	
10.0					End of Boring at 10 Feet		
12.5					Note: 1. All soil samples were screened with a MiniRae300 OVM photo-ionization detector (PID) and by utilizing olfactory senses. No petroleum odors were detected in all samples and all PID = 0 ppm.		
15.0							
17.5							

⊗ Calibrated Penetrometer Unconfined Compression

Water Level Observations			SEECO Consultants, Inc.			Boring Started	9/9/22	
W.L.						Boring Completed	9/9/22	
W.L.	Dry WS/WD	Dry ACR	7350 Duvan Drive, Tinley Park, IL 60477			Driller	EN	Rig D-50
W.L.			Approved	CWG	Job No. 13120G	Drawn By	SW	Sheet 1 of 1

First Environmental Laboratories, Inc.

IL ELAP / NELAC Certification # 100292

1600 Shore Road • Naperville, Illinois 60563 • Phone (630) 778-1200 • FirstEnv.com

November 03, 2022

Mr. Don Cassier
SEECO ENVIRONMENTAL SERVICES
7350 Duvan Drive
Tinley Park, IL 60477

Project ID: JOL WM
First Environmental File ID: 22-8263
Date Received: October 28, 2022

Dear Mr. Don Cassier:

The above referenced project was analyzed as directed on the enclosed chain of custody record.

All Quality Control criteria as outlined in the methods and current IL ELAP/NELAP have been met unless otherwise noted. QA/QC documentation and raw data will remain on file for future reference. Our accreditation number is 100292 and our current certificate is number:

1002922022-8: effective 02/10/2022 through 02/28/2023.

I thank you for the opportunity to be of service to you and look forward to working with you again in the future. Should you have any questions regarding any of the enclosed analytical data or need additional information, please contact me at (630) 778-1200.

Sincerely,

Neal E Cleghorn

Neal Cleghorn
Project Manager

First
Environmental
Laboratories, Inc.

IL ELAP / NELAC Certification # 100292

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Case Narrative

SEECO ENVIRONMENTAL SERVICES

Lab File ID: **22-8263**

Project ID: **JOL WM**

Date Received: **October 28, 2022**

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The results in this report apply to the samples in the following table:

Laboratory Sample ID	Client Sample Identifier	Date/Time Collected	
22-8263-001	SP-1 2'	10/22/22	7:00
22-8263-002	SP-2 2'	10/22/22	7:30
22-8263-003	SP-3 3'	10/22/22	8:00
22-8263-004	SP-4 2'	10/22/22	8:30
22-8263-005	SP-5 4'	10/22/22	9:00
22-8263-006	SP-6 3'	10/22/22	9:30
22-8263-007	SP-7 3'	10/22/22	10:00
22-8263-008	SP-8 2'	10/22/22	10:30
22-8263-009	SP-9 2'	10/22/22	11:00
22-8263-010	SP-10 3'	10/22/22	11:30
22-8263-011	SP-11 2'	10/22/22	12:00
22-8263-012	SP-12 2'	10/22/22	12:30

Sample Batch Comments:

Sample acceptance criteria were met.

First Environmental Laboratories, Inc.

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Case Narrative

SEECO ENVIRONMENTAL SERVICES

Lab File ID: **22-8263**

Project ID: **JOL WM**

Date Received: **October 28, 2022**

All quality control criteria, as outlined in the methods, have been met except as noted below or on the following analytical report.

The following is a definition of flags that may be used in this report:

Flag	Description	Flag	Description
A	Method holding time is 15 minutes from collection. Lab analysis was performed as soon as possible.		
B	Analyte was found in the method blank.	L	LCS recovery outside control limits.
<	Analyte not detected at or above the reporting limit.	M	MS recovery outside control limits; LCS acceptable.
C	Sample received in an improper container for this test.	P	Chemical preservation pH adjusted in lab.
D	Surrogates diluted out; recovery not available.	Q	Result was determined by a GC/MS database search.
E	Estimated result; concentration exceeds calibration range.	S	Analysis was subcontracted to another laboratory.
G	Surrogate recovery outside control limits.	T	Result is less than three times the MDL value.
H	Analysis or extraction holding time exceeded.	W	Reporting limit elevated due to sample matrix.
I	ICVS % rec outside 95-105% but within 90-110%		
J	Estimated result; concentration is less than routine RL but greater than MDL.	N	Analyte is not part of our NELAC accreditation or accreditation may not be available for this parameter.
RL	Routine Reporting Limit (Lowest amount that can be detected when routine weights/volumes are used without dilution.)	ND	Analyte was not detected using a library search routine; No calibration standard was analyzed.

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IL ELAP / NELAC Certification # 100292

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Analytical Report

Client: SEECO ENVIRONMENTAL SERVICES **Date Received:** 10/28/22

Project ID: JOL WM **Date Reported:** 11/03/22

Results are reported on an "as received" basis.

Lab No:	Sample ID:	Analyte	Result	R.L.	Units	Flags
pH @ 25°C, 1:2		**Method: 9045D**				
22-8263-001	SP-1 2'	Date Collected: 10/22/22	Time Collected: 7:00			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**8.28**		**Units**	
22-8263-002	SP-2 2'	Date Collected: 10/22/22	Time Collected: 7:30			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**7.93**		**Units**	
22-8263-003	SP-3 3'	Date Collected: 10/22/22	Time Collected: 8:00			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**7.91**		**Units**	
22-8263-004	SP-4 2'	Date Collected: 10/22/22	Time Collected: 8:30			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**7.98**		**Units**	
22-8263-005	SP-5 4'	Date Collected: 10/22/22	Time Collected: 9:00			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**7.83**		**Units**	
22-8263-006	SP-6 3'	Date Collected: 10/22/22	Time Collected: 9:30			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**8.39**		**Units**	
22-8263-007	SP-7 3'	Date Collected: 10/22/22	Time Collected: 10:00			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**8.45**		**Units**	
22-8263-008	SP-8 2'	Date Collected: 10/22/22	Time Collected: 10:30			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**8.48**		**Units**	
22-8263-009	SP-9 2'	Date Collected: 10/22/22	Time Collected: 11:00			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**7.90**		**Units**	
22-8263-010	SP-10 3'	Date Collected: 10/22/22	Time Collected: 11:30			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**8.23**		**Units**	

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Analytical Report

Client: SEECO ENVIRONMENTAL SERVICES **Date Received:** 10/28/22

Project ID: JOL WM **Date Reported:** 11/03/22

Results are reported on an "as received" basis.

Lab No:	Sample ID:	Analyte	Result	R.L.	Units	Flags
22-8263-011	SP-11 2'	Date Collected: 10/22/22	Time Collected: 12:00			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**8.27**		**Units**	
22-8263-012	SP-12 2'	Date Collected: 10/22/22	Time Collected: 12:30			
Analysis Date:	11/02/22 1:45 PM					
		pH @ 25°C, 1:2	**8.46**		**Units**	

First Environmental Laboratories, Inc.

1600 Shore Road, Suite D
Naperville, IL 60563
Phone: (630)778-1200 * Fax (630)778-1233
E-Mail: firstinfo@firstenv.com
IEPA Accreditation #100292
www.firstenv.com

CHAIN OF CUSTODY RECORD

Company Name: SEECO			
Street Address:			
City:	State:	Zip:	
Phone:	e-Mail: CASSIER@SEECO.COM		
Send Report To: CASSIER	Hardcopy: ☐	PDF e-Mail: ■	
Sampled By: DM			

Project I.D.: JOL WM

P.O. #:

Enter analyses required on the lines to the left. Place an "X" in the box below to indicate which samples require what analysis.

Date/Time Taken	Sample Description	Matrix*	pH	HOLD-Do not analyze	Comments	Lab I.D.
7:00 10/22/22	SP-1 2'	S	X		22-8263	001
7:30	SP-2 2'					002
8:00	SP-3 3'					003
8:30	SP-4 2'					004
9:00	SP-5 4'					005
9:30	SP-6 3'					006
10:00	SP-7 3'					007
10:30	SP-8 2'					008
11:00	SP-9 2'					009
11:30	SP-10 3'					010
12:00	SP-11 2'					011
12:30	SP-12 2'					012

FOR LAB USE ONLY:
Cooler Temperature: 0.1-6°C Yes X No ___ 5 °C
Received within 6 hrs of collection: ___
Ice Present: Yes X No ___

FOR LAB COURIER USE ONLY:
Sample Refrigerated: Yes ___ No ___
Refrigerator Temperature: ___ °C

Program: ☐ TACO/SRP ■ CCDD ☐ NPDES ☐ LUST ☐ SDWA

*Matrix Code Key: **DW**-drinking water **GW**-groundwater **WW**- wastewater **S**-soil **SL**-sludge **WIPE**-wipe **O**-other

Notes and Special Instructions: ER NA 10/28

Relinquished By:		Date/Time: 10/28/22	Received By:	Date/Time: 10/28/22	09:20
Relinquished By:		Date/Time:	Received By:	Date/Time:	

Rev 10/19

marion

prepared for:
Ref:

2022-09-27

Environmental Radius Report

NETRONLINE

2055 E. Rio Salado Pkwy
Tempe, AZ 85381
480-967-6752

Summary

Federal

	< 1/4	1/4 - 1/2	1/2 - 1
Lists of Federal NPL (Superfund) sites	0	0	0
Lists of Federal Delisted NPL sites	0	0	-
Lists of Federal sites subject to CERCLA removals and CERCLA orders	0	0	-
Lists of Federal CERCLA sites with NFRAP	0	0	-
Lists of Federal RCRA facilities undergoing Corrective Action	0	0	-
Lists of Federal RCRA TSD facilities	0	0	-
Lists of Federal RCRA generators	0	-	-
Federal institutional control/engineering control registries	0	-	-
Federal ERNS list	0	-	-

State

	< 1/4	1/4 - 1/2	1/2 - 1
Lists of state and tribal Superfund equivalent sites	0	0	0
Lists of state and tribal hazardous waste facilities	0	2	-
Lists of state and tribal landfills and solid waste disposal facilities	0	0	-
Lists of state and tribal leaking storage tanks	0	5	-
Lists of state and tribal registered storage tanks	1	-	-
State and tribal institutional control/engineering control registries	0	-	-
Lists of state and tribal voluntary cleanup sites	0	2	-
Lists of state and tribal brownfields sites	0	0	-

Other

	< 1/4	1/4 - 1/2	1/2 - 1
State and/or tribal lists of permitted facilities	2	-	-
Resource Conservation and Recovery Act Information (RCRAInfo)	0	7	-
U.S. EPA Underground Storage Tanks (UST)	1	-	-
U.S. EPA Toxic Release Inventory System (TRIS)	0	0	-

Lists of Federal NPL (Superfund) sites

The National Priorities List (NPL) is the list of sites of national priority among the known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The NPL is intended primarily to guide the EPA in determining which sites warrant further investigation. The NPL is updated periodically, as mandated by CERCLA.

There were no Federal NPL sites found within a one-mile radius of the target property.

Lists of Federal Delisted NPL sites

The EPA may delete a final NPL site if it determines that no further response is required to protect human health or the environment. Under Section 300.425(e) of the NCP (55 FR 8845, March 8, 1990), a site may be deleted when no further response is appropriate if EPA determines that one of the following criteria has been met: 1) EPA, in conjunction with the state, has determined that responsible parties have implemented all appropriate response action required, 2) EPA, in consultation with the state, has determined that all appropriate Superfund-financed responses under CERCLA have been implemented and that no further response by responsible parties is appropriate, 3) A remedial investigation/feasibility study (RI/FS) has shown that the release poses no significant threat to public health or the environment and, therefore, remedial measures are not appropriate.

There were no Federal Delisted NPL sites found within a half-mile radius of the target property.

Lists of Federal sites subject to CERCLA removals and CERCLA orders

CERCLA identifies the classes of parties liable under CERCLA for the cost of responding to releases of hazardous substances. In addition, CERCLA contains provisions specifying when Federal installations must report releases of hazardous substances and the cleanup procedures they must follow. Executive Order No. 12580, Superfund Implementation, delegates response authorities to EPA and the Coast Guard. Generally, the head of the Federal agency has the delegated authority to address releases at the Federal facilities in its jurisdiction.

There were no Federal sites subject to CERCLA removals and/or orders found within a half-mile radius of the target property.

Lists of Federal CERCLA sites with NFRAP

No Further Remedial Action Planned (NFRAP) is a decision made as part of the Superfund remedial site evaluation process to denote that further remedial assessment activities are not required and that the facility/site does not pose a threat to public health or the environment sufficient to qualify for placement on the National Priorities List (NPL) based on currently available information. These facilities/sites may be re-evaluated if EPA receives new information or learns that site conditions have changed. A NFRAP decision does not mean the facility/site is free of contamination and does not preclude the facility/site from being addressed under another federal, state or tribal cleanup program.

There were no Federal CERCLA sites with No Further Remedial Action Planned (NFRAP) decisions found within a half-mile radius of the target property.

Lists of Federal RCRA facilities undergoing Corrective Action

Corrective action is a requirement under the Resource Conservation and Recovery Act (RCRA) that facilities that treat, store or dispose of hazardous wastes investigate and cleanup hazardous releases into soil, ground water, surface water and air. Corrective action is principally implemented through RCRA permits and orders. RCRA permits issued to TSDFs must include provisions for corrective action as well as financial assurance to cover the costs of implementing those cleanup measures. In addition to the EPA, 44 states and territories are authorized to run the Corrective Action program.

There were no Federal RCRA facilities undergoing corrective action(s) found within a half-mile radius of the target property.

Lists of Federal RCRA TSD facilities

The final link in RCRA's cradle-to-grave concept is the treatment, storage, and disposal facility (TSDF) that follows the generator and transporter in the chain of waste management activities. The regulations pertaining to TSDFs are more stringent than those that apply to generators or transporters. They include general facility standards as well as unit-specific design and operating criteria.

There were no Federal RCRA treatment, storage and disposal facilities (TSDFs) found within a half-mile radius of target property.

Lists of Federal RCRA generators

A generator is any person who produces a hazardous waste as listed or characterized in part 261 of title 40 of the Code of Federal Regulations (CFR). Recognizing that generators also produce waste in different quantities, EPA established three categories of generators in the regulations: very small quantity generators, small quantity generators, and large quantity generators. EPA regulates hazardous waste under the Resource Conservation and Recovery Act (RCRA) to ensure that these wastes are managed in ways that protet human health and the environment. Generators of hazardous waste are regulated based on the amount of hazardous waste they generate in a calendar month, not the size of their business or facility.

There were no Federal RCRA generators found at the target property and/or adjoining properties.

Federal institutional control/engineering control registries

Institutional Controls (IC) are defined as non-engineered and/or legal controls that minimize the potential human exposure to contamination by limiting land or resource use. Whereas, Engineering Controls (EC) consist of engineering measures (e.g, caps, treatment systems, etc.) designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants through environmental media.

There were no Federal institutional or engineering controls found at the target property.

Federal ERNS list

The Emergency Response Notification System (ERNS) is a database used to store information on notification of oil discharges and hazardous substances releases. The ERNS program is a cooperative data sharing effort encompassing the National Response Center (NRC), operated by the US Coast Guard, EPA HQ and EPA regional offices. ERNS data is used to analyze release notifications, track EPA responses and compliance to environmental laws, support emergency planning efforts, and assist decision-makers in developing spill prevention programs.

There were no Federally recorded releases of oil and/or hazardous substances at the target property.

Lists of state and tribal Superfund equivalent sites

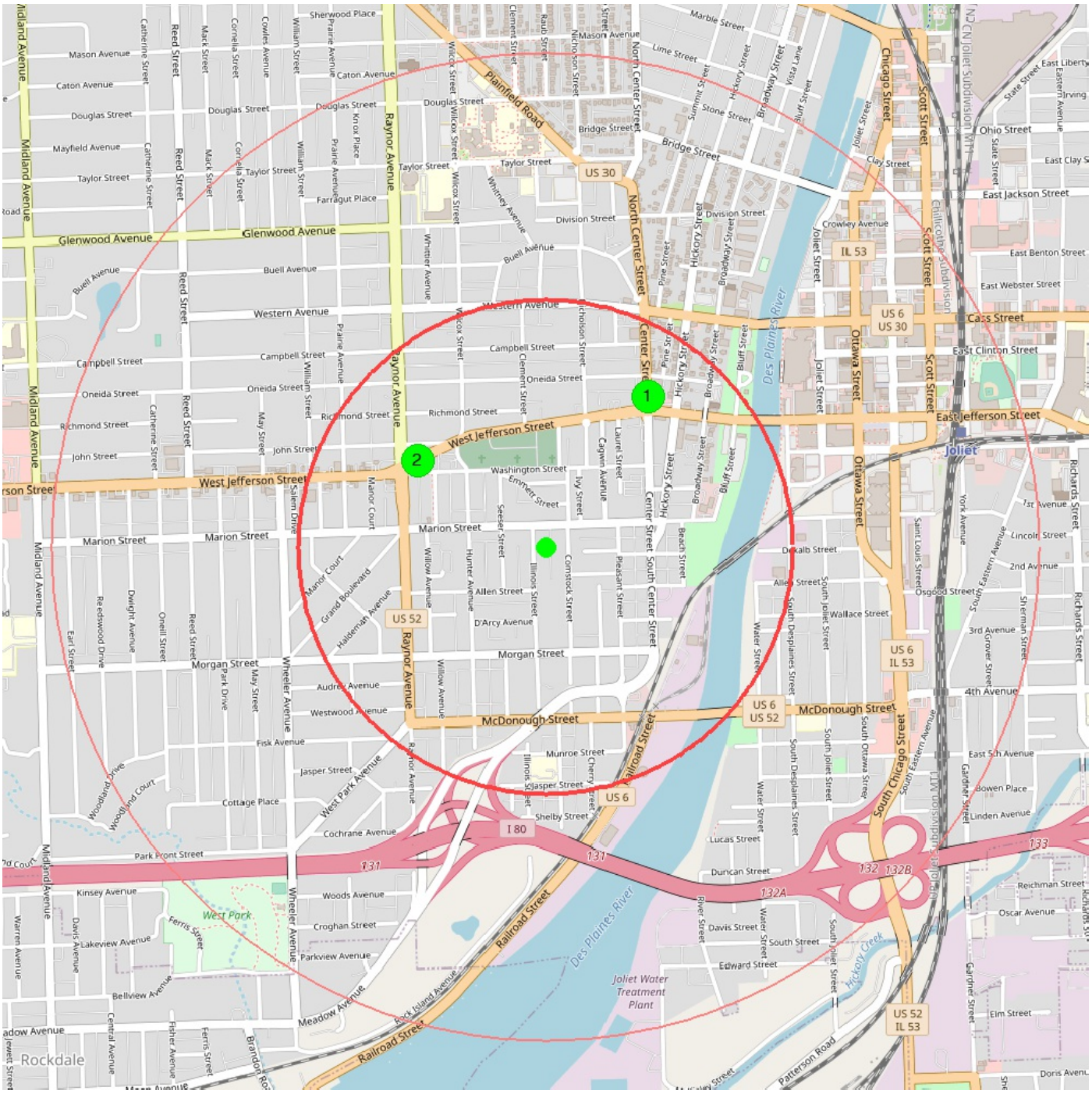
In order to maintain close coordination with the states and tribes in the NPL listing decision process, the EPA's policy is to determine the position of states and tribes on sites that EPA is considering for listing. Consistent with this policy, since 1996, it has been the EPA's general practice to seek the state or tribe's position on sites under consideration for NPL listing by submitting a written requiest to the governor/state environmental agency or tribe. Various states may have their own program for identifying, investigating and cleaning up sites where consequential amounts of hazardous waste may have been disposed that work in conjunction with the EPA's Superfund remedial program.

There were no State and/or tribal Superfund equivalent sites found within a one-mile radius of target property.

Lists of state and tribal hazardous waste facilities

IEPA - RCRA HAZARDOUS WASTE FACILITIES

The Resource Conservation and Recovery Act's (RCRA) hazardous waste permitting program ensures the safe management of hazardous wastes. Under this program, EPA establishes requirements regarding the treatment, storage and disposal of hazardous wastes. The permitting program is important to the cradle-to-grave management system for hazardous wastes, which prevents dangerous releases and avoids costly Superfund cleanups. Permits are issued by authorized state or EPA regional offices. State and EPA cooperate to implement RCRA. Hazardous waste management facilities receive hazardous wastes for treatment, storage, or disposal. These facilities are often referred to as treatment, storage and disposal facilities, or TSDFs. This data set was searched to return all records within a half-mile of the target property.


1
2
Plainfield Road
Raynor Avenue
Midland Avenue
Reed Street
Glenwood Avenue
Western Avenue
Campbell Street
Oneida Street
Richmond Street
West Jefferson Street
Marion Street
Morgan Street
McDonough Street
Bridge Street
Taylor Street
Douglas Street
Mason Avenue
Caton Avenue
Mayfield Avenue
Buell Avenue
Division Street
Crowley Avenue
East Jackson Street
East Webster Street
East Jefferson Street
East Clinton Street
Cass Street
Ohio Street
East Benton Street
Joliet
US 30
US 6
US 52
IL 53
I 80
North Center Street
South Center Street
Chicago Street
Scott Street
Ottawa Street
Joliet Street
Des Plaines River
Railroad Street
Hickory Creek
Joliet Water Treatment Plant
West Park
Rockdale
Washington Street
Emmett Street
Allen Street
D'Arcy Avenue
Cottage Place
Cochrane Avenue
Park Front Street
Kinsey Avenue
Woods Avenue
Croghan Street
Parkview Avenue
Meadow Avenue
Bellview Avenue
Lakeview Avenue
Ferris Street
Jasper Street
Fisk Avenue
Westwood Avenue
Audrey Avenue
Wheeler Avenue
Willow Avenue
Hunter Avenue
Illinois Street
Comstock Street
Pleasant Street
Beach Street
Bluff Street
Broadway Street
Hickory Street
Pine Street
Summit Street
Stone Street
Lime Street
Marble Street
Nicholson Street
Clement Street
Whittier Avenue
Wilcox Street
Prairie Avenue
William Street
Cornelia Street
Mark Street
Catherine Street
Knox Place
Farragut Place
Taylor Street
Manor Court
Salem Drive
Grand Boulevard
Haldeman Avenue
Dwight Avenue
Redgewood Drive
Earl Street
Oneil Street
Park Drive
May Street
Woodland Drive
Woodland Court
Shelby Street
Munroe Street
Lucas Street
Duncan Street
Davis Street
Edward Street
South Street
Water Street
South Desplaines Street
South Joliet Street
South Ottawa Street
South Chicago Street
Wallace Street
Osgood Street
Dekalb Street
Allen Street
Lincoln Street
2nd Avenue
3rd Avenue
4th Avenue
5th Avenue
York Avenue
Saint Louis Street
Grover Street
Sherman Street
Richards Street
Gardner Street
Bowen Place
Linden Avenue
Reichman Street
Oscar Avenue
Elm Street
Doris Avenue
Patterson Road
Sherwood Place
Ivy Street
Cagwin Avenue
Laurel Street
Center Street
Division Street
Whitney Avenue
Buell Avenue
Western Avenue
Campbell Street
Oneida Street
Richmond Street
John Street
May Street
Seeger Street
Willow Avenue
Hunter Avenue
Illinois Street
Comstock Street
Pleasant Street
Beach Street
Bluff Street
Broadway Street
Hickory Street
Pine Street
Summit Street
Stone Street
Lime Street
Marble Street
Nicholson Street
Clement Street
Whittier Avenue
Wilcox Street
Prairie Avenue
William Street
Cornelia Street
Mark Street
Catherine Street
Knox Place
Farragut Place
Taylor Street
Douglas Street
Caton Avenue
Mason Avenue
Mayfield Avenue
Buell Avenue
Division Street
Crowley Avenue
East Jackson Street
East Webster Street
East Jefferson Street
East Clinton Street
Cass Street
Ohio Street
East Benton Street
Joliet
US 30
US 6
US 52
IL 53
I 80
North Center Street
South Center Street
Chicago Street
Scott Street
Ottawa Street
Joliet Street
Des Plaines River
Railroad Street
Hickory Creek
Joliet Water Treatment Plant
West Park
Rockdale
Washington Street
Emmett Street
Allen Street
D'Arcy Avenue
Cottage Place
Cochrane Avenue
Park Front Street
Kinsey Avenue
Woods Avenue
Croghan Street
Parkview Avenue
Meadow Avenue
Bellview Avenue
Lakeview Avenue
Ferris Street
Jasper Street
Fisk Avenue
Westwood Avenue
Audrey Avenue
Wheeler Avenue

1

RCRA Name	**KINNEY RAY MOTORS**
Source ID	**ILD984830166**
Address	**104 N CENTER ST**
City	**JOLIET**
Registry ID	**110005893943**
Significant Non-Compliance	**No**
distance from center (miles)	0.3689
data source	last updated 2022-02-18 from IEPA-HWF

2

RCRA Name	**PRECISION TUNE**
Source ID	**ILD984830000**
Address	**714 W JEFFERSON**
City	**JOLIET**
Registry ID	**110005893836**
Significant Non-Compliance	**No**
distance from center (miles)	0.3132
data source	last updated 2022-02-18 from IEPA-HWF

Lists of state and tribal landfills and solid waste disposal facilities

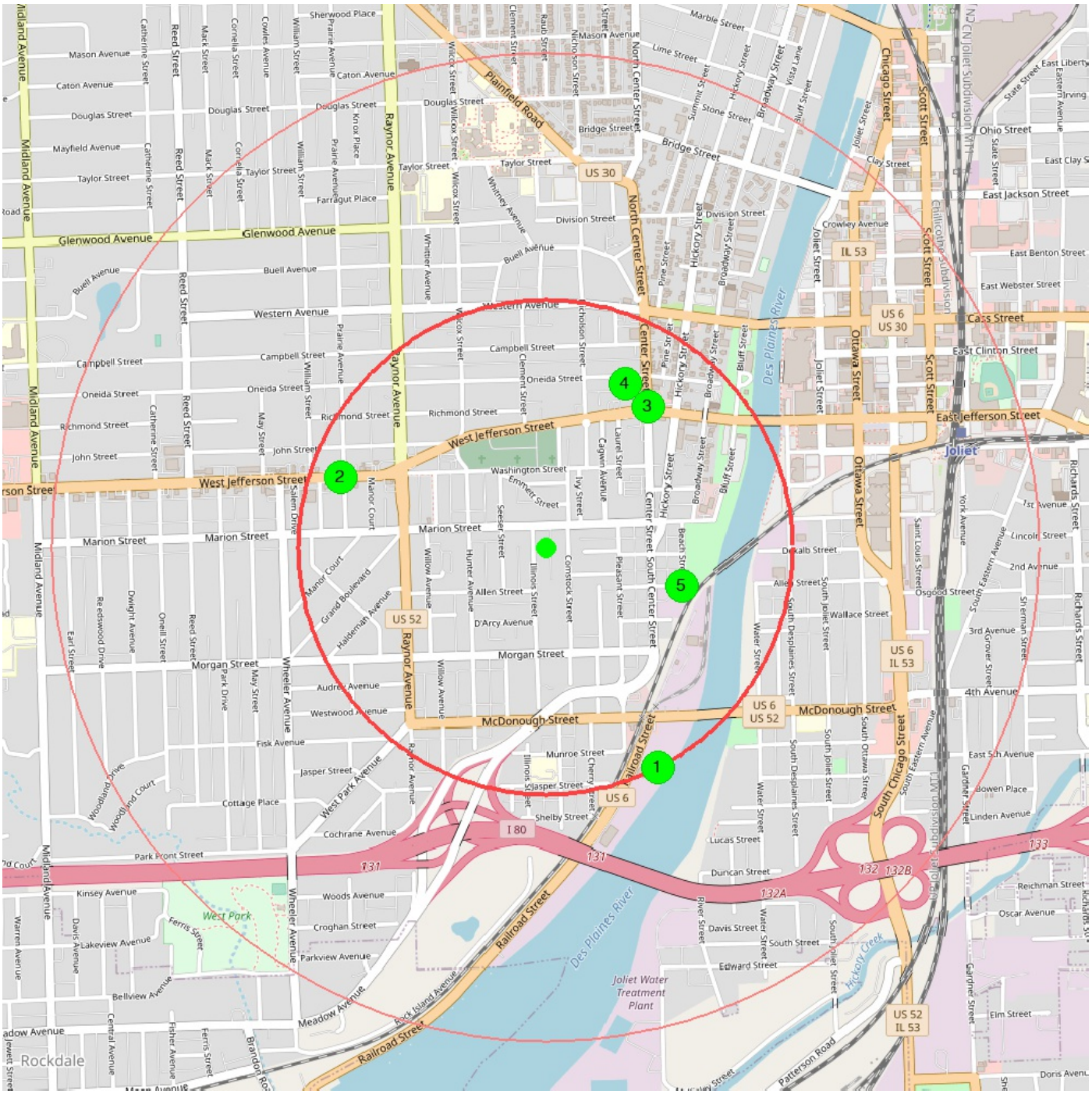
Title 40 of the CFR parts 239 through 259 contain the regulations for non-hazardous solid waste programs set up by the states. EPA has requirements for state solid waste permit programs, guidelines for the processing of solid waste, guidelines for storage and collection of commercial, residential and institutional solid waste, and the criteria for municipal solid waste landfills. State solid waste programs may be more stringent than the federal code requires.

There were no State and/or tribal landfills or solid waste disposal facilities found within a half-mile radius of the target property.

Lists of state and tribal leaking storage tanks

IEPA - LEAKING UNDERGROUND STORAGE TANKS

The Illinois Environmental Protection Agency (IEPA) Leaking UST Section oversees the remedial activities after a release from an UST has been reported to the Illinois Emergency Management Agency. This dataset has been acquired from Illinois EPA's Leaking UST database, and has been searched to return all leaking USTs within a half-mile of the target property.



center 41.521181530131 97 - 88.09524352496777

0.5 mile

1.0 mile

1

LPC Number	**1970455401**
IEMA Number	**970643**
IEMA Date	**04/16/1997**
Site Name	**Ken-Will 76**
Address	**415 South Center St.**
City	**Joliet**
Primary RP	**Ozinga Illinois RMC, Inc.**
Gasoline	**True**
Diesel	**False**
Jet Fuel	**False**
Used Oil	**False**
Non-Petroleum	**False**
distance from center (miles)	0.4993
data source	last updated 2022-02-22 from IEPA-LUST

2

LPC Number	**1970455193**
IEMA Number	**891847**
IEMA Date	**09/21/1989**
Site Name	**L&M Hubcaps (currently AD Joliet, Inc.)**
Address	**912 West Jefferson St.**
City	**Joliet**
Primary RP	**L&M Hubcaps**
Gasoline	**True**
Diesel	**False**
Jet Fuel	**False**
Used Oil	**False**
Non-Petroleum	**False**
Non-LUST Date	**11/26/2013**
distance from center (miles)	0.4382
data source	last updated 2022-02-22 from IEPA-LUST

3

LPC Number	**1970455202**
IEMA Number	**20020818**
IEMA Date	**06/10/2002**
Site Name	**Wendy's International**
Address	**104 North Center St.**
City	**Joliet**
Primary RP	**Wendy's International**
Gasoline	**False**
Diesel	**False**
Jet Fuel	**False**
Used Oil	**False**
Non-Petroleum	**False**
distance from center (miles)	0.3526
data source	last updated 2022-02-22 from IEPA-LUST

4

LPC Number	**1970455202**
IEMA Number	**20020819**
IEMA Date	**06/10/2002**
Site Name	**Wendy's International**
Address	**104 North Center St.**
City	**Joliet**
Primary RP	**Wendy's International**
Gasoline	**True**
Diesel	**False**
Jet Fuel	**False**
Used Oil	**False**
Non-Petroleum	**False**
distance from center (miles)	0.3526
data source	last updated 2022-02-22 from IEPA-LUST

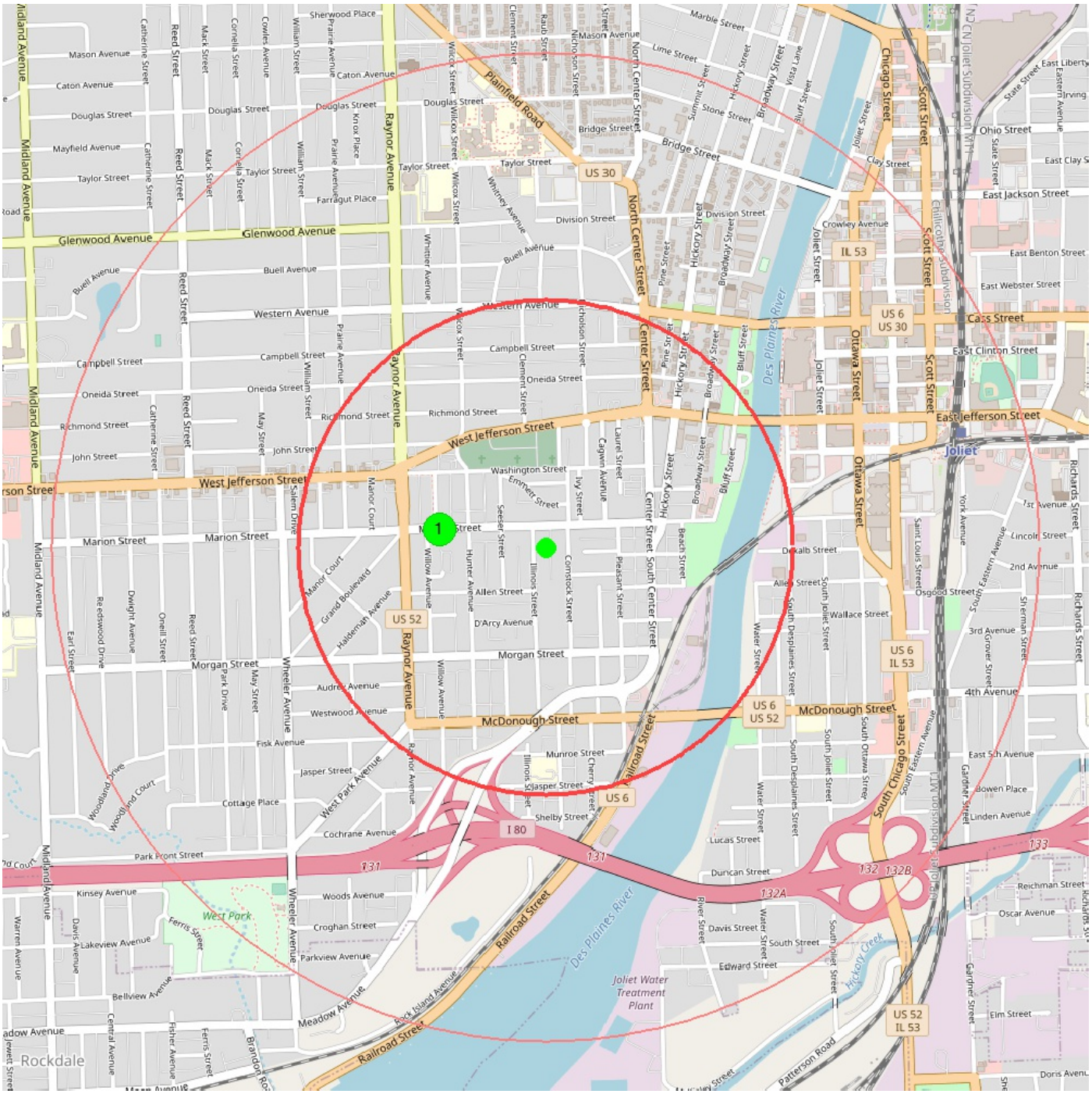
5

LPC Number	**1970455427**
IEMA Number	**980751**
IEMA Date	**04/06/1998**
Site Name	**Wunderich Doors, Inc.**
Address	**300 West Allen St.**
City	**Joliet**
Primary RP	**Wunderich Doors, Inc.**
Gasoline	**True**
Diesel	**False**
Jet Fuel	**False**
Used Oil	**False**
Non-Petroleum	**False**
distance from center (miles)	0.2879
data source	last updated 2022-02-22 from IEPA-LUST

Lists of state and tribal registered storage tanks

ISFM - UNDERGROUND STORAGE TANKS

Illinois State Fire Marshal (ISFM) Office of Petroleum and Chemical Safety maintains a database containing the locations and regulatory status of underground storage tanks (USTs) within the state of Illinois. This database was searched to return all USTs relating to the target and/or adjacent properties.



center 41.521181530131 97 - 88.09524352496777

0.5 mile

1.0 mile

1

Facility ID	**2025887**
Facility Status	**Closed**
Facility Name	**St Patricks Church**
Address	**710 W Marion**
City	**Joliet**
Facility Type	**None**
Owner ID	**U0014390**
Tank ID	**2**
Tank Status	**Removed**
Tank Regulated Status	**Federal**
Tank Capacity	**8000**
Product	**Heating Oil**
Last Used Date	**12/1/1980**
Removed Date	**8/1/1990**
OSFM First Notify Date	**7/2/1990**
distance from center (miles)	0.2180
data source	last updated 2022-03-29 from ISFM-UST

State and tribal institutional control/engineering control registries

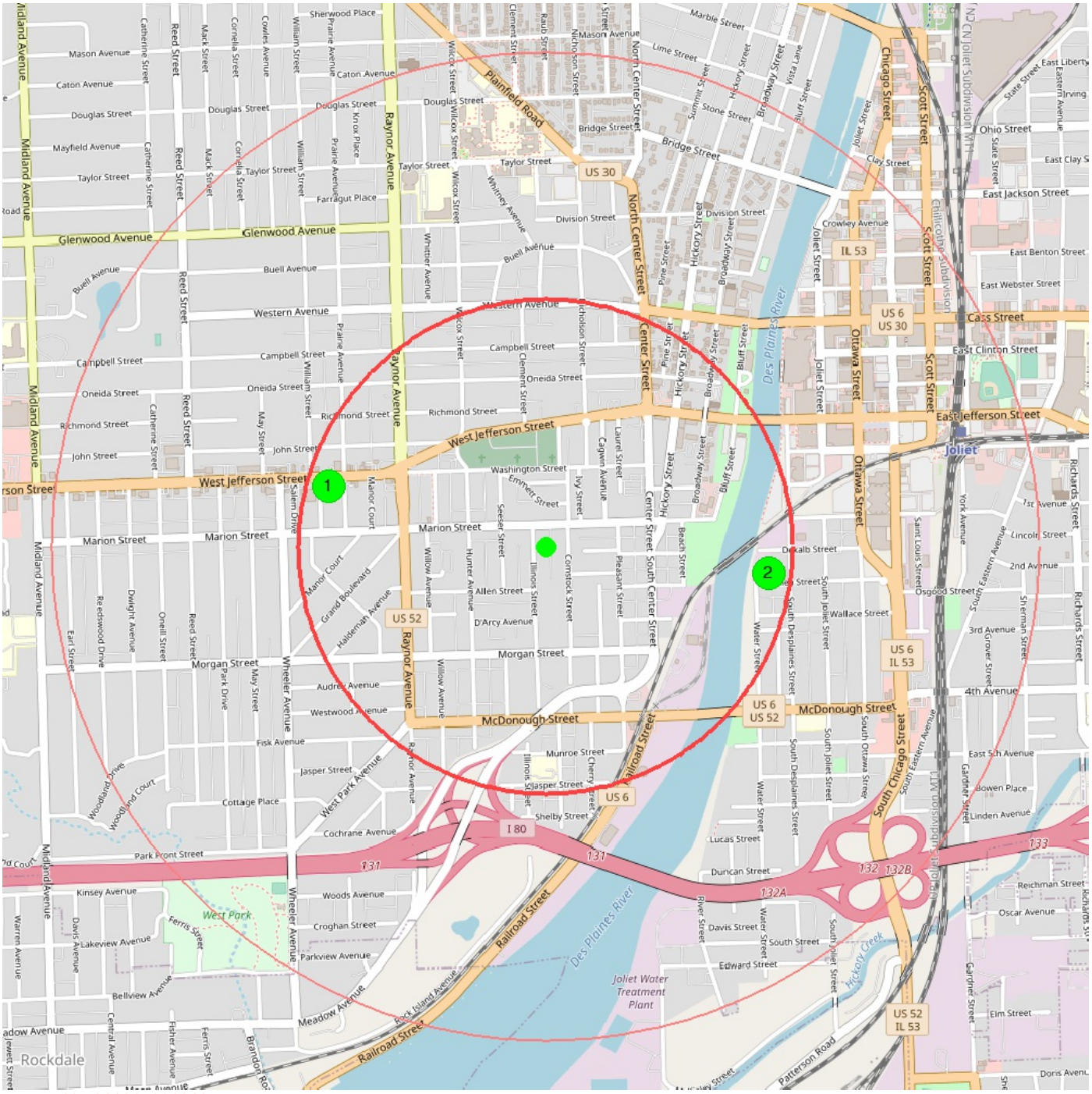
Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Engineering controls consist of engineering measures (e.g, caps, treatment systems, etc.) designed to minimize the potential for human exposure to contamination by either limiting direct contact with contaminated areas or controlling migration of contaminants through environmental media. It is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable.

There were no State and/or tribal institutional and/or engineering controls found filed against the target property.

Lists of state and tribal voluntary cleanup sites

IEPA - SITE REMEDIATION PROGRAM

The Voluntary Site Remediation Program (VSRP) provides Remediation Applicants (i.e., any persons seeking to perform investigavtive or remedial activities) the opportunity to receive Illinois Environmental Protection Agency (IEPA) review, technical assistance and no further remediation determinations from the IEPA. IEPA is authorized to issue No Further Remediation (NFR) letters to the Remedial Applicants who have successfully demonstrated, through proper investigation and, when warranted, remedial action, that environmental conditions at their remediation site do not present a significant risk to human health or the environment. This dataset has been searched to return all VSRP sites within a half-mile of the target property.



center 41.52118153013197 -88.09524352496777

0.5 mile

1.0 mile

1

IEPA ID	**1970455193**
Site Name	**Auto Doc**
Address	**912 West Jefferson Street**
City	**Joliet**
Consultant Company	**Applied Geoscience, Inc.**
Active Site	**No**
distance from center (miles)	0.4556
data source	last updated 2022-02-22 from IEPA-VSR

2

IEPA ID	**1974450103**
Site Name	**Treadstone Tire Recycling**
Address	**175 South Des Plaines Street**
City	**Joliet**
Consultant Company	**Environmental Consulting Group, Inc.**
Active Site	**No**
distance from center (miles)	0.4560
data source	last updated 2022-02-22 from IEPA-VSR

Lists of state and tribal brownfields sites

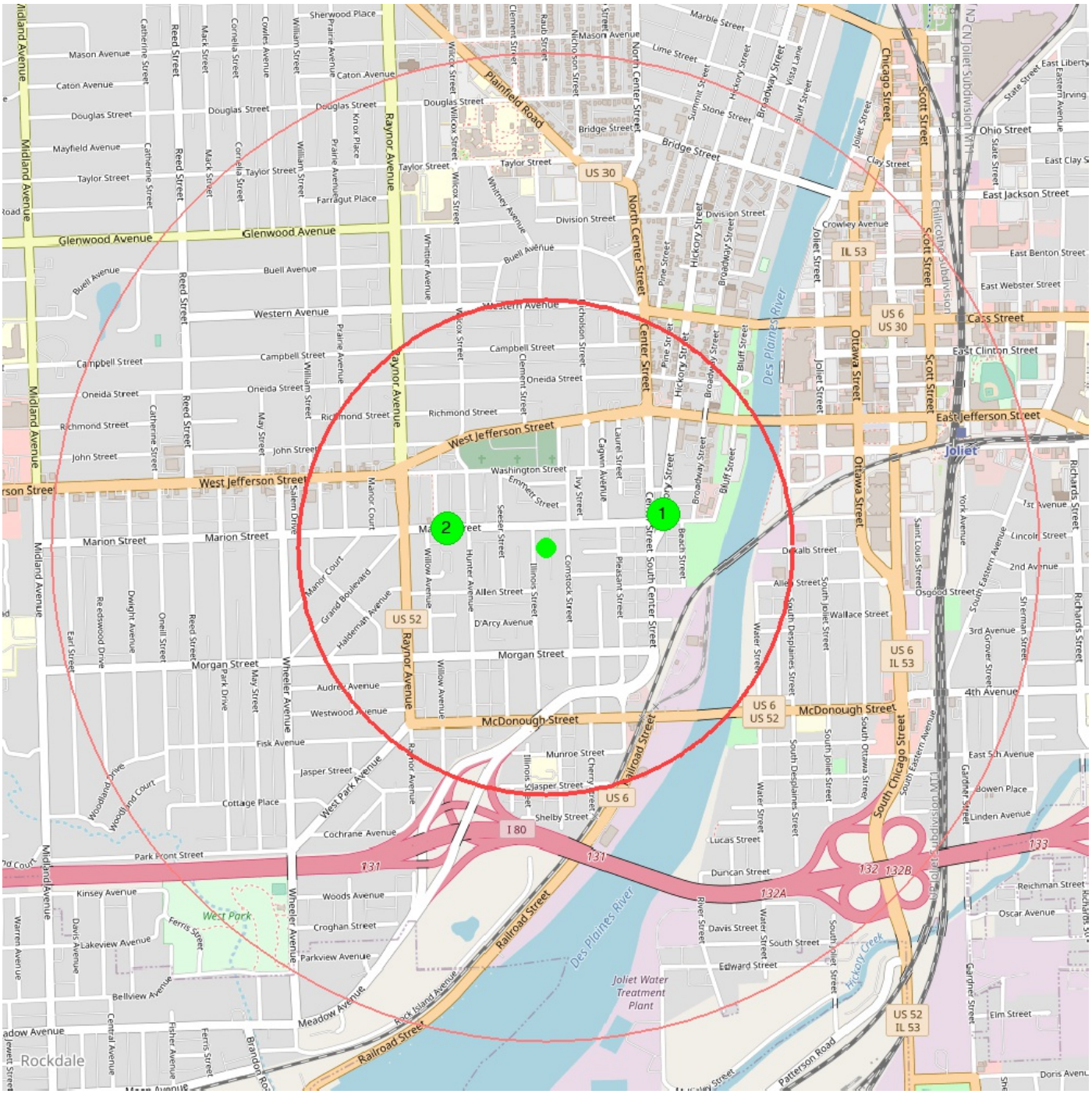
Since its inception in 1995, EPA's Brownfields and Land Revitalization Program has grown into a proven, results-oriented program that has changed the way communities address and manage contaminated property. The program is designed to empower states, tribes, communities, and other stakeholders to work together to prevent, assess, safely clean up, and sustainably reuse brownfields. Beginning in the mid-1990s, EPA provided small amounts of seed money to local governments that launched hundreds of two-year Brownfields pilot projects and developed guidance and tools to help states, communities and other stakeholders in the cleanup and redevelopment of brownfields sites.

There were no State and/or tribal brownfields sites found within a half-mile radius of the target property.

State and/or tribal lists of permitted facilities

ILLINOIS - AGENCY COMPLIANCE AND ENFORCEMENT SYSTEMS

The ACES computer system supports the compliance and enforcement activities that exist primarily within the Illinois Bureaus of Air, Water, and Land, the Division of Legal Counsel, and the Office of Chemical Safety. The intent of the system is to track compliance and enforcement processes and to share the information throughout the agency.


1
2
Joliet
Rockdale
West Park
Joliet Water Treatment Plant
Des Plaines River
Hickory Creek
Plainfield Road
Raynor Avenue
Midland Avenue
Reed Street
Glenwood Avenue
Western Avenue
Campbell Street
Oneida Street
Richmond Street
John Street
West Jefferson Street
Marion Street
Morgan Street
McDonough Street
Bridge Street
Taylor Street
Douglas Street
Mason Avenue
Caton Avenue
Mayfield Avenue
Buell Avenue
Division Street
Cass Street
East Jefferson Street
East Clinton Street
East Jackson Street
Ohio Street
Scott Street
Chicago Street
Ottawa Street
Joliet Street
North Center Street
South Center Street
Center Street
Bluff Street
Hickory Street
Broadway Street
Pine Street
Water Street
Clay Street
Crowley Avenue
East Benton Street
East Webster Street
East Liberty Street
Lincoln Street
2nd Avenue
3rd Avenue
4th Avenue
Dekalb Street
Allen Street
Osgood Street
Wallace Street
Lucas Street
Duncan Street
Davis Street
South Street
Edward Street
Railroad Street
Meadow Avenue
Rock Island Avenue
Patterson Road
Elm Street
Oscar Avenue
Reichman Street
Bowen Place
Linden Avenue
East 5th Avenue
Park Front Street
Cochrane Avenue
Shelby Street
Munroe Street
Jasper Street
Fisk Avenue
Westwood Avenue
Audrey Avenue
Cottage Place
Woodland Drive
Woodland Court
Kinsey Avenue
Woods Avenue
Croghan Street
Parkview Avenue
Lakeview Avenue
Bellview Avenue
Ferris Street
Sherwood Place
Farragut Place
Whittier Avenue
Whitney Avenue
Washington Street
Richards Street
Sherman Street
Grover Street
Gardner Street
Doris Avenue
Elm Street
Illinois Street
Comstock Street
Pleasant Street
Hunter Avenue
Willow Avenue
Seeger Street
Manor Court
Grand Boulevard
Haldeman Avenue
Salem Drive
Dwight Avenue
Oneill Street
Earl Street
Redstwood Drive
Park Drive
May Street
Wheeler Avenue
Ivy Street
Laurel Street
Cagwin Avenue
Emmert Street
Richmond Street
Prairie Avenue
Knox Place
Cornelia Street
Cowles Avenue
William Street
Mark Street
Catherine Street
Clement Street
Nicholson Street
Wilcox Street
Raub Street
Lime Street
Marble Street
Stone Street
Summit Street
Vista Lane
Bluff Street
Joliet Street
Division Street
Crowley Avenue
Chillicothe Subdivision
Eastern Avenue
State Street
Irving
York Avenue
Saint Louis Street
South Eastern Avenue
South Joliet Street
South Desplaines Street
South Ottawa Street
South Chicago Street
Water Street
River Street
Richards Street
Gardner Street
Reichman Street
Oscar Avenue
Elm Street
Doris Avenue
Patterson Road
Railroad Street
Meadow Avenue
Rock Island Avenue
Bellview Avenue
Ferris Street
Central Avenue
Fisher Avenue
Brandon Road
Lakeview Avenue
Davis Avenue
Warren Avenue
Midland Avenue
Woodland Court
Earl Street
Redstwood Drive
Park Drive
May Street
Wheeler Avenue
Ivy Street
Laurel Street
Cagwin Avenue
Emmert Street
Richmond Street
Prairie Avenue
Knox Place
Cornelia Street
Cowles Avenue
William Street
Mark Street
Catherine Street
Clement Street
Nicholson Street
Wilcox Street
Raub Street
Lime Street
Marble Street
Stone Street
Summit Street
Vista Lane
Bluff Street
Joliet Street
Division Street
Crowley Avenue
Chillicothe Subdivision
Eastern Avenue
State Street
Irving
York Avenue
Saint Louis Street
South Eastern Avenue
South Joliet Street
South Desplaines Street
South Ottawa Street
South Chicago Street
Water Street
River Street
Richards Street
Gardner Street
Reichman Street
Oscar Avenue
Elm Street
Doris Avenue
Patterson Road
Railroad Street
Meadow Avenue
Rock Island Avenue
Bellview Avenue
Ferris Street
Central Avenue
Fisher Avenue
Brandon Road
Lakeview Avenue
Davis Avenue
Warren Avenue
Midland Avenue
Woodland Court
Earl Street
Redstwood Drive
Park Drive
May Street
Wheeler Avenue
Ivy Street
Laurel Street
Cagwen

1

Registry ID	**110018484978**
Name	**COMCAR IND**
Address	**24 S HICKORY**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170000805369**
Interest Type	**STATE MASTER**
Point of Reference Description	**ENTRANCE POINT OF A FACILITY OR STATION**
Date Created	**19-OCT-04**
Date Updated	**29-DEC-14**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.2485
data source	last updated from FACILITY REGISTRY SERVICE

2

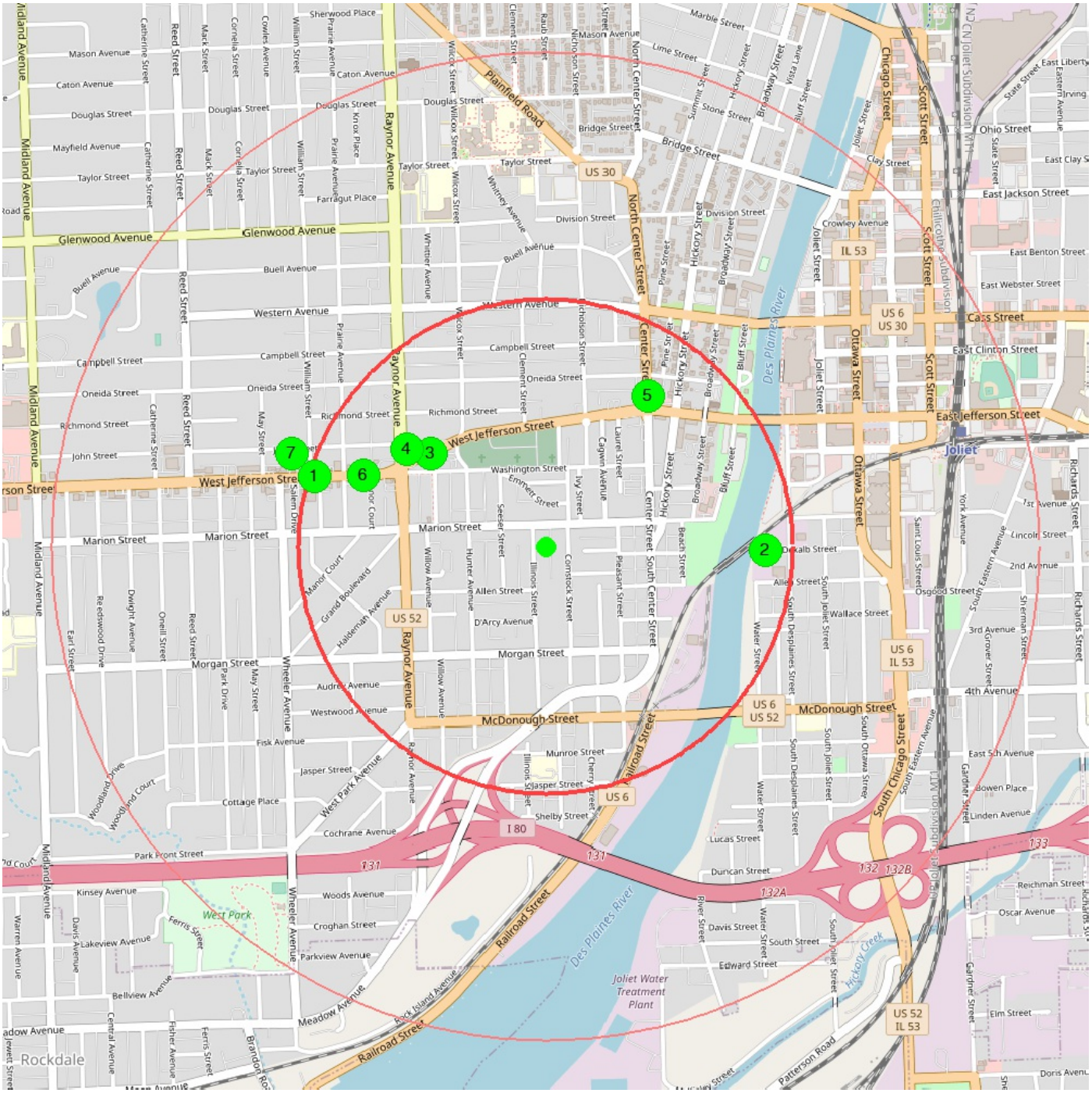
Registry ID	**110018485058**
Name	**ST PATRICKS CHURCH**
Address	**710 W MARION**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170000805635**
Interest Type	**STATE MASTER**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**19-OCT-04**
Date Updated	**19-AUG-09**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.2027
data source	last updated from FACILITY REGISTRY SERVICE

Resource Conservation and Recovery Act Information (RCRAInfo)

RESOURCE CONSERVATION AND RECOVERY ACT INFORMATION SYSTEM

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste.

Please note that RCRAInfo contains all hazardous waste handlers in addition to TSDFs, generators, and facilities undergoing RCRA corrective action. One may encounter duplicate records from the TSDF, generators, and/or the RCRA corrective action sections. This source was searched for all records within a half-mile of the target property.



1

Registry ID	**110016730493**
Name	**FUJI PHOTO FILM USA INC**
Address	**916 W JEFFERSON**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170001434641, RCRAINFO:ILR000126110**
Interest Type	**STATE MASTER, UNSPECIFIED UNIVERSE**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**13-FEB-04**
Date Updated	**26-JAN-12**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.4882
data source	last updated from FACILITY REGISTRY SERVICE

2

Registry ID	**110009374649**
Name	**IL BELL**
Address	**120 W DEKALB ST**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170000392073, RCRAINFO:ILD982205940, RCRAINFO:ILD982207573**
Interest Type	**STATE MASTER, UNSPECIFIED UNIVERSE**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**01-MAR-00**
Date Updated	**26-JAN-12**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.4446
data source	last updated from FACILITY REGISTRY SERVICE

3

Registry ID	**110005857251**
Name	**MCGRATH OFFICE EQUIPMENT INC**
Address	**710 W JEFFERSON ST**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170000245651, RCRAINFO:ILD981784911**
Interest Type	**STATE MASTER, UNSPECIFIED UNIVERSE**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**01-MAR-00**
Date Updated	**26-JAN-12**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.2986
data source	last updated from FACILITY REGISTRY SERVICE

4

Registry ID	**110005893836**
Name	**PRECISION TUNE**
Address	**714 W JEFFERSON**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170000278116, RCRAINFO:ILD984830000**
Interest Type	**STATE MASTER, UNSPECIFIED UNIVERSE, VSQG**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**01-MAR-00**
Date Updated	**26-JAN-12**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.3132
data source	last updated from FACILITY REGISTRY SERVICE

5

Registry ID	**110005893943**
Name	**RAY KINNEY MOTORS**
Address	**104 N CENTER ST**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170000278223, RCRAINFO:ILD984830166**
Interest Type	**STATE MASTER, UNSPECIFIED UNIVERSE, VSQG**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**01-MAR-00**
Date Updated	**26-JAN-12**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.3689
data source	last updated from FACILITY REGISTRY SERVICE

6

Registry ID	**110009379715**
Name	**REALTO CLEANERS & DRYERS**
Address	**819 W JEFFERSON ST**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170000158941, AIR:IL000197045AGZ, AIRS/AFS:1719700360, RCRAINFO:ILD984848994**
Interest Type	**AIR MINOR, STATE MASTER, UNSPECIFIED UNIVERSE**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**01-MAR-00**
Date Updated	**09-JAN-15**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.3957
data source	last updated from FACILITY REGISTRY SERVICE

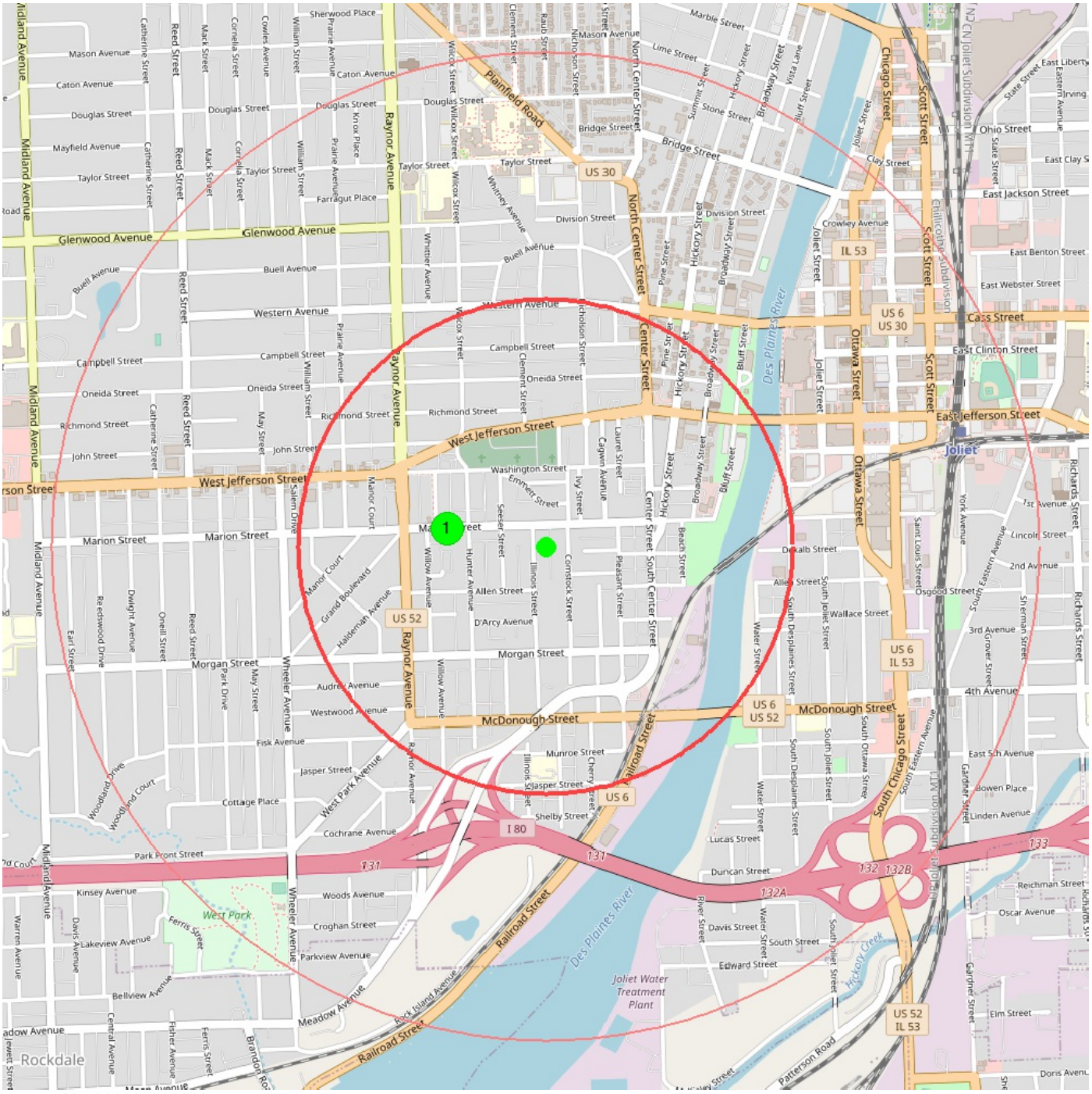
7

Registry ID	**110017620485**
Name	**WALGREENS 2773**
Address	**916 W JEFFERSON-B**
City	**JOLIET**
Site Type	**STATIONARY**
Program Acronyms	**ACES:170001554627, RCRAINFO:ILR000127290**
Interest Type	**STATE MASTER, UNSPECIFIED UNIVERSE**
Point of Reference Description	**CENTER OF A FACILITY OR STATION**
Date Created	**22-APR-04**
Date Updated	**26-JAN-12**
FRS Facility Detail Report URL	**Link**
distance from center (miles)	0.4882
data source	last updated from FACILITY REGISTRY SERVICE

U.S. EPA Underground Storage Tanks (UST)

EPA - UNDERGROUND STORAGE TANKS

Approximately 542,000 underground storage tanks (USTs) nationwide store petroleum or hazardous substances. The greatest potential threat from a leaking UST is contamination of groundwater, the source of drinking water for nearly half of all Americans. EPA, states, territories, and tribes work in partnership with industry to protect the environment and human health from potential releases. EPA developed UST Finder, a mapping application containing a comprehensive, state-sourced national map of UST and leaking UST data. It provides attributes and locations of active and closed USTs, UST facilities, and LUST sites from states as of 2018-2019 and from Tribal lands and US territories as of 2020-2021. This data set was searched to return all records regarding the target and/or adjoining properties.



center 41.52118153013197 -
88.09524352496777

0.5 mile

1.0 mile

1

Facility ID	**IL2025887**
Name	**St Patricks Church**
Address	**710 W Marion**
City	**Joliet**
County	**Will**
State	**Illinois**
ZIP Code	**60436**
Latitude	**41.52171151**
Longitude	**-88.0990923**
Closed USTs	**2**
Facility Status	**Closed UST(s)**
Land Use	**Developed, Medium Intensity**
Population Within 1,500ft	**2181**
Within Source Water Protection Area (SPA)	**No**
Within Groundwater Wellhead Protection Area (WHPA)	**No**
Within 100-Year Floodplain	**No**
distance from center (miles)	0.2024
data source	last updated 2020-11-18 from USEPA-UST

U.S. EPA Toxic Release Inventory System (TRIS)

No records found

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